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## IMPROVED TECHNIC FOR THE CURE OF VENTRAL HERNIA.

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ACCORDING to Gross, "ventral hernia is a hernia involving the parietes of the belly, which are rendered defective in consequence of a wound or accidental separation of some of the muscular and tendinous fibers."

**Causation.**—The essential factor in the production of these herniæ is a deficiency in the fibrous aponeuroses which give strength to the abdominal walls (Kelly). Dr. Henry O. Marcy says that as a result of the surgical division of the abdominal wall, it may occur from defective union in consequence of improper closure of the parts. Spencer Wells points out the fact that operators often failed to include the peritoneum in the line of sutures. Another and not infrequent cause is found in the imperfect or non-union of a portion of the abdominal wall from the use of the drainage-tube, from stitch-abscess and from long incisions.

A review of 340 cases of ventral hernia following abdominal incisions showed that in the great majority the wound healed by granulation (Bull and Coley), while Dr. P. Assmy wisely assigns division of the motor nerves as the cause of ventral hernia following extramedian abdominal sections. In these incisions, parallel, or nearly parallel to the linea alba, the terminal branches of the intercostal nerves supplying the rectus muscle are divided.

There is no anastomosis with the nerves of the other side and, in all probability, none with neighboring nerves. Consequently, that part of the muscle distal to the nerve loses its innervation and undergoes paralysis and atrophy. In the farther development of a hernia, the atrophic and, hence, unresisting portion of the abdominal walls is protruded in response to intra-abdominal pressure. Dr. Andrew F. Currier mentions a lowered vitality from tuberculosis, syphilis, chronic alcoholism and fatty degeneration at the menopause or prolonged drainage as predisposing causes.

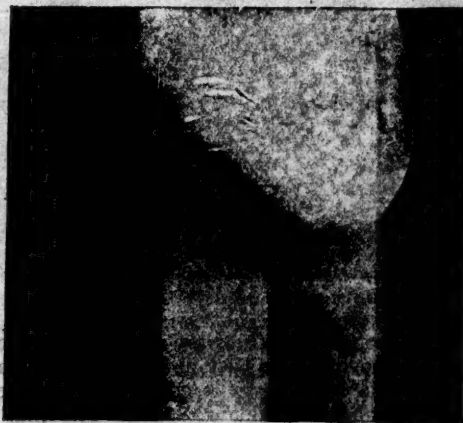
**Frequency.**—Dr. John Homans says he is surprised to find that thirty women out of over three hundred undergoing abdominal operations have ventral hernia, nearly 10 per cent. Dr. H. O. Marcy finds it is variously estimated by different authors that ventral hernia follows the closure of the abdominal wound after laparotomy in from five to ten per cent. of the sum total of cases.

**Prevention.**—Since Dr. H. O. Marcy has adopted the method of closing the abdominal wall

in layers with buried sutures in over one hundred cases of laparotomy he has had but one case of ventral hernia. Dr. Chas. P. Noble finds that closing the abdominal wall in three layers and suturing the aponeurosis of one side upon that of the opposite, thus making a flat seam by an alternate up-and-down stitch, has been valuable in preventing hernia.

The preceding methods of prevention are all interesting but of little value. William J. Mayo states the surgical principle involved in closing the abdominal wall in the following words: "The ingenuity wasted in dealing with the peritoneum has been enormous, the formation of buttresses or peculiar method of handling a membrane which is notoriously impotent to aid in holding back the protrusion is a waste of time." The

FIG. 1.



Case 1.—Extramedian Ventral Hernia Following Appendectomy.

only object in view is to prevent this membrane from insinuating itself between the muscular and aponeurotic structures, and preventing the union of the real retention agents. A careful study of the anatomical structure of the parts involved and the technic of different operators has led me to adopt the method of operating which I now present.

**Technic.**—Ventral herniæ may be considered as median and extramedian. The former following median abdominal incisions; the latter resulting mostly from operations for appendicitis.

An elliptical incision is made a little within the border of the opening in the abdominal wall. This must be done carefully, as there is frequently a loop of intestine adherent to the inner surface of the hernial sac. The skin and super-

ficial fasciæ (if they can be distinguished) are then dissected back, exposing the sheath of the rectus muscle. On the outer side a similar dissection is made an inch or more over the external oblique. The edges of the opening are trimmed and a No. 25 silver-wire suture is inserted at the upper angle of the opening by lifting the abdominal wall and passing the needle through the peritoneum, rectus muscle and skin, about one inch from the free border of the opening. The needle on the other end of the wire is similarly passed through the abdominal wall on the opposite side. Silver-wire sutures are inserted at intervals of one inch throughout the entire length of the incision. All the subcutaneous tissues are then united by a continuous kangaroo-tendon suture, and the skin is closed by a continuous suture of the same material.

FIG. 2.



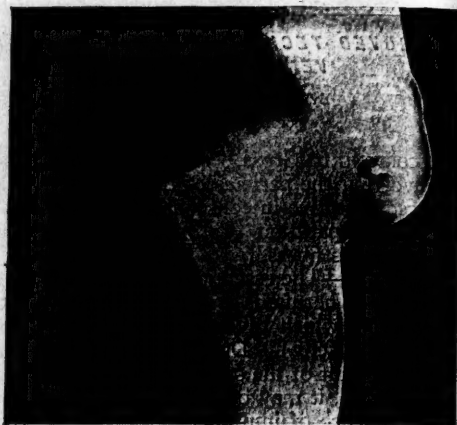
Case I.—Retention Silver-Wire Sutures in Place.

The deep wire sutures are now taken up one by one, moving them back and forward, to make sure that a loop of gut is not included between the wire and the abdominal wall. The ends of the wire are wound around a piece of ivory on either side and drawn sufficiently tight to relieve the tension on the kangaroo-tendon stitches. This is the old and nearly obsolete "quill suture" used for a new purpose. Half the wires are removed in ten days and the remainder in fifteen days. When the hernia is in the median line the principle is the same. The object is to relieve the tension on the stitches which hold the muscular tissues together until firm union has taken place.

*Case I.*—This illustrates the extramedian operation. The patient, a boy six years old, came under my care at the St. Francis Hospital October 3, 1897, to be treated for ventral hernia. He gave the following history. July 17, 1895, he was operated upon for suppurative appendicitis at the Hartford Hospital. A few days later perforation occurred. He remained in the hospital thirteen months, during which time four operations were performed to close the perforation;

the last, by Dr. Wiggin of New York, was successful. During his treatment at the hospital, a rubber drainage-tube was lost in the abdominal cavity. Later an abscess formed in the lumbar

FIG. 3.

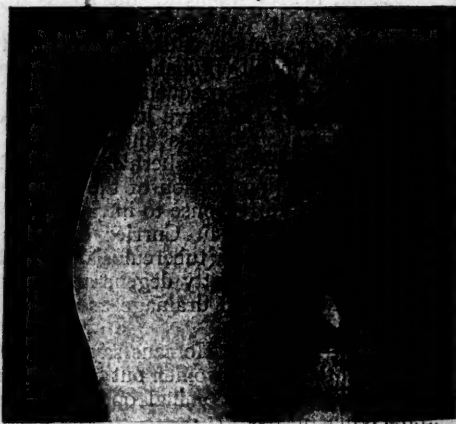


Case I.—Condition Before Operation.

region, just above the brim of the pelvis, and when the abscess broke the drainage-tube came out.

Here we have a long history of operations, suppuration and drainage. The opening in the abdominal wall was three and one half inches long by three inches wide. At a consultation, the staff voted against an operation, as there was so little hope of success. The patient was removed to the Woodland Sanatorium, where the operation was performed November 27, 1897. An elliptical incision was made a little within the

FIG. 4.



Case I.—Condition Two and a Half Years After Operation.

border of the opening in the abdominal wall, adhesions were broken up and the skin dissected back, so as to expose the sheath of the rectus muscle. A similar dissection was made on the outer side, over the external oblique.

Beginning at the upper angle, four silver-wire sutures were inserted from the peritoneum outward through the abdominal wall, one inch from the border of the incision on either side. The muscular tissues were closed by a continuous kangaroo-tendon suture, passing through all the subcutaneous tissues, as they could not be separated owing to the long-continued inflammatory and suppurative processes. The skin was then closed by a continuous suture of the same material. The deep sutures were drawn sufficiently tight to relieve the tension on the stitches through the muscles and were retained by winding them around an ivory pencil. The patient was placed on a liquid animal diet to prevent distention of the viscera. The end wires were removed in ten days and the remaining ones in fifteen days. The patient was kept in bed three weeks and made an excellent recovery. The condition two and a half years later is shown in Fig. 4.

The details of this case have been given somewhat fully to show that it was an exceptionally bad case for a good result.

*Case II.*—A woman operated upon for the removal of a fibroid tumor of the uterus, November 22, 1894. She was admitted to the St. Francis Hospital, where the operation for the radical cure of her ventral hernia was performed by the writer, December 30, 1898. Fig. 5 illustrates the size of the rupture.

The usual elliptical incision was made, the tissues were dissected back on both sides, so as to expose the sheath of the recti muscles, and silver-wire sutures were placed as previously described. The subcutaneous tissues were closed by the usual continuous suture passing through the sheath of the recti muscles. The skin was closed as usual and the deep silver wires were made

FIG. 5.



Case II.—Size of Hernia.

sufficiently tight to relieve the tension. At the end of ten days the dressings were removed and it was found that primary union had taken place perfectly, two of the silver-wire sutures were removed and the rest of the wires were removed

five days later. At the end of three weeks she was discharged, fully recovered. Fig. 6 illustrates the condition one year and a half after the operation.

The reason for the unsatisfactory results which

FIG. 6.



Case II.—Condition One and a Half Years After Operation.

so frequently follow operations for the radical cure of ventral hernia in the class of cases in which a very long incision is made is the strong tension necessary to bring the abdominal walls together. The long incision deprives the rectus muscle of its nerve supply and is followed by a protracted period of suppuration and drainage which is attended by a considerable loss of tissue, and a slow closure by granulation. These factors aid in the giving way of the tissues before a proper union of the parts has been secured. The technic here described fully meets these requirements and has proved highly satisfactory in a series of these extreme cases.

#### DIFFERENTIAL DIAGNOSIS OF CHRONIC RHEUMATISM.

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PROBABLY no better text for a paper on the differential diagnosis of chronic rheumatism could be chosen than these words from Dr. Archibald Garrod's article in Allbutt's System of Medicine. "The term chronic rheumatism," he says, "as usually employed at present, is a survival of the days when scarcely any attempt had been made to distinguish the various diseases which tend to implicate the joints. When we try to limit its use so that it may acquire some degree of scientific accuracy, we find that the great majority of the morbid conditions thus described are not in a strict sense rheumatic at all; and that, further, as we shall see, those very cases in which the evidence of the continued, smouldering activity of the true rheumatic proc-



ess over a period of months or even of years is clearest are not usually included as examples of chronic rheumatism."

A great advance has been made in recent years in the rational diagnosis of acute rheumatism. We are able to define with some degree of accuracy what we mean by the term at present, although it is probable that we still have grouped under the name a series of affections that the pathology and bacteriology of the future will show us to be essentially distinct. Time was when every acute arthritis was thought to be rheumatism. If arthritis occurred in the course of scarlet fever, it was considered to be a rheumatic complication of the disease. When it occurred in the third or fourth week of a gonorrhea, as it so often does, it was still thought to be rheumatic. Gonorrhea and scarlet fever were supposed especially to predispose to the development of rheumatism. Now we know that almost every specific infectious disease may involve joint-complications which are due to the specific cause of the disease, and that even so mild an infection as mumps may in certain epidemics be complicated in a considerable number of the cases by mono- or polyarthritis.

At present we make no distinction between the cases of rheumatism in which one joint is affected and those in which many joints and the heart and even the serous membranes of the brain and cord are affected. We make no distinction between the cases which seem to run their course in a week or ten days and those which last five to eight weeks despite all treatment. Certain observers have found a bacillus in rheumatic joints, others have found a diplococcus, still others have described a degenerate form of staphylococcus which they consider to be causative of the disease. It is not beyond the range of possibility that all of these are specific for so-called rheumatic arthritis under certain circumstances, and that sometimes we will be able to make the distinction between them, just as we are now able to distinguish various microbic infections that were formerly classed under the same head.

The advance, such as it is, in the rational diagnosis of acute rheumatism has not yet invaded the domain of chronic rheumatism. In this subject we have a large number of types of disease, evidently distinct from one another, yet which are classed under the single name chronic rheumatism. As a consequence the prognosis and treatment of the affection in practice are extremely unsatisfactory. Without going very deeply into the subject there are four classes of cases in the group known as chronic rheumatism that can be rather readily distinguished. There is, first, recurring subacute rheumatism. By this is meant not frank attacks of acute rheumatism, but slight attacks of arthritis, with some swelling and effusion into the joints, that occur at no very great intervals in certain predisposed subjects. Such recurring at-

tacks of disease, as the result of the establishment of a predisposition by the original invasion of a malady, are not unusual. Erysipelas is a familiar example; the tendency to slight abscesses, to furunculosis, is also well known. Quinsy and pneumonia recur in certain subjects. These slight attacks of rheumatism are not difficult of diagnosis and yield rather promptly to the ordinary treatment, so that commonly they do not present much difficulty to the practitioner.

The second class of cases that we diagnose as chronic rheumatism occurs especially in children. It consists mainly of symptoms of abarticular rheumatism that recur over and over again, especially during unsettled weather. There are fleeting pains, sometimes described as growing pains, often accompanied by slight swelling of the joints. At times there is that mysterious equivalent for rheumatism in nervous subjects, chorea. Recurring tonsillitis represents another phase of the affection. Erythema nodosum and peliosis rheumatica are still others. Certain chronic skin affections, eczema and psoriasis, seem to be rooted in the same defective constitution that is the predisposing factor for the more frankly rheumatic symptoms. This class of cases must be diagnosed by a comprehensive realization of the significance of the varied symptoms and of their intimate relations with one another. The whole picture can, however, scarcely be mistaken.

The third group of chronic rheumatic cases is the one which really deserves the name. It contains the cases in which joint-lesions that have occurred during an attack of rheumatism persist and even become worse by secondary degenerative processes extending over years. This sometimes leads to permanent damage to the structures of the joint and to lasting deformity. The diagnosis in this case is dependent principally on the history and on the fact that changes in the joint-capsule and in other structures of the joint can be readily detected on palpation. This is true chronic rheumatism, although of course the secondary changes that occur in the joints are probably due to some modification of the original bacteriological cause of the acute rheumatism, as well as to some special tendency in the tissues of the individual. As a rule, these cases are not difficult of diagnosis. The important thing is the clear history of the original rheumatism.

There is a fourth class of cases, more numerous than any of the others, which is often diagnosed chronic rheumatism but which is really not rheumatism in any proper sense of the word. It contains a most varied collection of ailments under this very accommodating title. It is the differential diagnosis of these affections that I wish to discuss. They are characterized especially by pain. As a rule, when a patient comes to a physician complaining of pain in the neighborhood of a joint, with some disability for which there is no obvious traumatic cause, the affection is set down as rheumatism, and is treated as such, al-



though there may be no history of precedent rheumatism. Many of the cases are relieved, for the time at least, by ordinary rheumatic treatment, because in our day it must be remembered that it is mainly the coal-tar antipyretics and analgesics that are administered as remedies for rheumatism. These will relieve painful conditions in peripheral nerves due to almost any cause. Any one who has seen salicylic acid, for instance, used as a dressing for wounds knows how soothing it is and how little patients suffer from the ordinary after-effects of slight surgical operations, or the discomforts attached to the removal of bandages, and the like, where it is used as a dressing. The pain even of ordinary toothache will be greatly diminished by a full dose of any of the ordinary coal-tar analgesics. That extremely bothersome symptom, pain, due to infiltration at the root of a tooth, just at the beginning of an abscess, can be better relieved by this method than by any other, and dentists now use coal-tar products to a considerable extent. This is a true arthritic pain, for the teeth are jointed to the jaw, but we would scarcely speak of it as rheumatic. Relief of pain by the salicylates, or coal-tar analgesics, does not confirm the diagnosis rheumatism. The causes for the pain continue to act. It recurs and the only relief lies in the further administration of drugs, which do absolutely nothing, however, to remove the cause of the discomfort. The only rational treatment would be to discover the cause of the painful condition and endeavor to ameliorate it.

In some twenty cases seen in private practice and at Professor Katzenbach's clinic at the New York Polyclinic during the past year and a half patients have come with the ready-made diagnosis rheumatism, or they had been treated for rheumatism by other physicians, yet on examination they were found to have only what may be called pseudo-chronic rheumatism. While the cases are too few to have any statistical value, the conditions underlying the pain give a fair idea of the character of the affections that are often mistaken for chronic rheumatism. In eight of the cases the painful symptoms were in the foot and leg and the patients were found to have a greater or less degree of flatfoot or, as it has been well called, weakfoot. Five of these eight cases were very marked examples of this condition. Three of them had been treated for a considerable length of time for rheumatism by various physicians. Some had examined the foot and leg, others had not. One case in private practice had gone the rounds to a number of general practitioners. The pain of weakfoot is not confined to the foot itself, nor is it always so localized in the ankle and instep as to call especial attention to these parts. Frequently the pain is most marked near the proximal end of the great toe and in the heel; in other cases it extends to the calf. It is probable that the pain in the region of the calf is due to the fact that the muscles here, owing to the defect in the arch at the

ankle, are employed at a mechanical disadvantage as compared with their use under normal conditions. This leads to overtire and causes pain which extends even as high as the knee. The diffuseness of the pain and the fact that it is apt to be worse on damp days, when the over-stretched ligaments are still further relaxed and when the wearing of rubbers emphasizes the abnormality in the ankle, help to confirm the mistaken diagnosis rheumatism.

In two of the more pronounced cases of flatfoot the pain was first noticed only shortly before the patients applied for treatment. The deformity had evidently been developing for some time, but had given no symptoms. In one of the cases there had been a considerable loss of weight shortly before. The general impairment of nutrition probably weakened still further the already abnormally-functioning tissues of the ankle-joint. In the other case a stumble, with some turning of the ankle, brought on the pain in the right foot and it afterward developed in the left, probably as the result of the lameness in the other leg, throwing extra work on the uninjured ankle. This occurrence of symptoms from weakfoot, when the condition is already well-advanced and without any preliminary discomfort, is not very unusual. Patients are incredulous that the condition of flatfoot which they have had more or less for years should be the cause of pains that they feel only for a few months, or sometimes even less. Prompt and permanent relief, however, follows the employment of the proper treatment for the flatfoot and convinces them of the correctness of the diagnosis.

It is a source of not a little error in these cases of flatfoot to consider that the pain and disability are always in proportion to the amount of deformity present. Dr. Whitman, who has made a special study of this subject of flatfoot, says: "The inherited flatfoot, or that acquired early in life, or the complete flatfoot of long duration, or the weakfoot to which the individual has accommodated himself, may cause no actual discomfort or pain. There is no definite relation between the degree of deformity and the severity of the symptoms. If these facts are borne in mind one of the most important stumbling-blocks in the way of a proper apprehension of the true nature of the disability and its effective treatment will have been removed."

He continues: "One must also rid one's mind of the notion that the weak- and flatfoot is a necessary sign of degeneration to be found only among the weak-fibred and ill-nourished. The predisposition to deformity and the weakfoot in its slighter grade are perhaps as common in the well-born and well-fed as among the traditional mill-girls. The development of the deformity, the exchange of discomfort for disability, the inherited or acquired predisposition existing will naturally be more frequent, more rapid and more marked, among those who are obliged to use

the feet constantly then among those who are not."

Rheumatism may affect a weakfoot, but most of the cases give what are falsely supposed to be rheumatic symptoms. The important points for the diagnosis of flatfoot are to be found in the gait of the patient, the posture when standing, the limitation of movement, and the spastic, painful condition that can be demonstrated by passive and voluntary motion during a careful examination. The patient's walk is almost typical. Usually the heel is brought down more forcibly than normally and there is a tendency to eversion of the toes. The pigeon-toe walk, the characteristic walk of the American Indian, by the way, although usually the subject of so much derision, is a sign of an especially-strong arch to the foot. If the line of the crest of the tibia continued into the foot would fall on the big toe or even to the inner side of it, then the strain is being borne too much on the inner side of the foot. This often gives rise to some swelling around the ankle and some effusion into the joints, so that the diagnosis rheumatism seems justified. Often the shoes disclose the fact that the feet are being used at a mechanical disadvantage. The heels are down at the back and the inner part of the sole is more worn than the rest of the shoe. In mild cases of flat- or weakfoot, especially in neurotic patients who unconsciously exaggerate the discomfort and pain they feel, it is often hard to convince oneself that the pains complained of are due to the slight amount of deformity that exists. The placing of a wedge of felt on the inner side of the foot will, with appropriate massage and passive motion, often relieve the symptoms and show what is the real cause at work in producing them.

Five cases of supposed chronic rheumatism were really occupation neuroses. Four of these complained of vague pains in the forearm and two of them in the shoulder. A fifth patient had his pains in the knee. He worked a lathe all day with his right foot, while bearing his weight on his left leg. It was in this left leg that the painful condition developed in the neighborhood of the knee. Discomfort was felt not only during the day but also at night. This was sometimes enough to disturb sleep and was worse on damp days. I have recently had a dentist tell me that a similar condition of discomfort very often develops in dentists from long-continued use of a dental engine. As with the lathe it develops not in the leg used to run the engine, but in the other on which the body-weight is borne. Disability finally results and a spastic, neuralgic condition develops around the knee-joint, which prevents further work for some time. As a result of years of such work with the dental engine and lathe there is a characteristic halt in the gait of many dentists that is well-recognized by the dentists themselves. In a recent magazine article descriptive of the working of a bicycle factory, attention was called to these painful condi-

tions that develop in the legs of those employed to run lathes. Such affections are evidently much more common than has been supposed and occupation neuroses or musculoses of the leg are by no means rare. Many of them are constantly taken for chronic rheumatism.

It is in the arm, however, that neuroses are most frequent. Writer's cramp is a typical example. Of the four cases, however, that have been under my personal observation during this past year in only two did the trouble come from excessive writing. One was the result of improper use of the muscles of the arm in ironing shirt-bosoms; another occurred in a meat-inspector who sat for six hours a day examining with a microscope specimens of meat for export. The position assumed was an awkward one, and the frequent movements required in examining a number of fields in successive microscopic slides were the cause of vague pains in the upper arm and shoulder that sometimes even disturb the patient's rest at night.

It is unfortunate that the occupation neurosis which develops from writing in improper positions (for it is this rather than excessive writing that brings it on) should have been labeled "writer's cramp." The affection is more frequently a brachyalgia, a sore arm with consequent disability, than it is a muscular cramp. These sore arms may develop from many causes other than the occupation that requires fine movements and accurate coordination. Bernhardt of Berlin described some years ago an epicondylalgia, a painful affection of the condyles of the humerus due to some unusual exertion of the muscles of the forearm. It occurs typically in nervous women after carrying an umbrella on a stormy day or in waitresses as a result of carrying heavy dishes. A form of brachyalgia analogous to this has become very familiar to us here in America since the introduction of the long skirts. These garments necessitate constant holding up, and, as they are often heavy, pains in the forearm develop which are usually most marked about the wrist. As the pain of epicondylalgia occurs also in the neighborhood of a joint the error of considering that both of these affections are due to the rheumatic diathesis is easily made. The fact that the discomfort is apt to be more marked on damp days adds to the suspicion of rheumatism and with some show of reason.

These painful conditions in the arm do not develop except in patients with neurotic tendencies or in those who by heredity have a somewhat unstable nervous system. Very often, too, at the time of their development, patients are not in as good physical condition as they usually are. It is well, therefore, in such subjects to exclude the functional neuroses and obtain some unmistakable symptom of rheumatism before diagnosing painful conditions as rheumatic and treating them as such. Instead of the depressant treatment by analgesics, which may afford temporary



relief, these patients usually need tonic and constitutional treatment with regulation of their methods of performing habitual actions.

In 3 cases, that which had been diagnosed chronic rheumatism proved to be traumatic neuroses of joints. By this I mean that condition of sensitiveness to external influences and to the slightest overexertion which develops in a joint after an injury, although no trace of the injury remains as far as any ordinary examination can determine. A dislocation is completely reduced, yet for months, sometimes years after, the joint structures act as a most sensitive barometer to changes in the weather and resent at once any extra work that may be put on them. Sometimes this sensitiveness remains in abeyance for long periods and then becomes noticeable when the patient's general health has deteriorated for some reason, or when a certain amount of nervous exhaustion has come on. Such cases are often greatly benefited by massage. It would seem that the old injury disturbed some of the lymph-paths around the joint and so interfered with the normal metabolism of the peripheral nerve-endings to the part, making them more sensitive.

Two cases of varicose veins of the leg had been treated as rheumatism before coming to the clinic. In neither case was the varicose condition very marked. There were small bunches of varicose veins in the neighborhood of the knee and it was here that pain was especially marked. It has been pointed out that at times when the superficial veins are not very varicose some of the deep veins are markedly dilated and tortuous. The dull, heavy ache of these concealed varicose veins can be rather easily mistaken for rheumatic pains.

One case of supposed chronic rheumatism proved to be meralgia paresthetica. There was on the outside of his thigh a region of lowered sensibility in which he had burning sensations that sometimes grew positively painful. The condition became worse in the winter and, situated as it was over the large muscles of the thigh, was readily mistaken for muscular rheumatism and treated as such. As there is no known method of treatment that will surely improve the condition, it might almost as well be treated as rheumatism as anything else except that the use of counterirritants, which often do good in muscular rheumatism, usually makes the painful condition of meralgia paresthetica worse.

All of these cases seem of interest, because they show that there are a number of chronic painful conditions, sometimes mistaken for chronic rheumatism, that should be carefully differentiated if patients are to be more than temporarily benefited. In addition to these there is undoubtedly in genuine chronic rheumatism, that is, in the chronic painful conditions that develop as a consequence of true rheumatism, a group of affections the differentiation of which from one another will serve as a suggestive text for many

an advance in diagnostic methods in the century that is just opening. Chronic rheumatic cases deserve and will repay careful study. Too often now they are promptly labeled and set aside as if our knowledge of them were definite and complete and nothing further could be learned about them.

#### THE ESSENTIAL CONDITIONS FOR HABITATION TO DEVELOP AND MAINTAIN HEALTHFUL FAMILY EXISTENCE.

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SOUND family life conserves social stability. That element that differentiates man from animal is the home, *vis.*, a condition for rational development.

The primordial conception of home was merely shelter, manifest in the relics of prehistoric and savage dwellings. With the changing social-political fabric there is an evolution of housing consonant with advancing civilization.

Centers of population or great cities, with their attendant crowding, congested areas and tall houses, have existed since the earliest times. The tower of Babel was sixty stories high, or from five hundred to eight hundred feet. Herodotus tells us of Babylonian houses four or five stories high. Jerusalem had eight- and ten-story buildings. Athenian law limited buildings for residence purposes to ten stories. Roman buildings were ten to twelve stories front, and fourteen to fifteen stories rear elevation, with some rooms eight or ten feet high and others not tall enough to stand in. Roman poets speak of lodgings into which "one must creep." The mediæval feudal era finds humanity surging within the protection of city walls. Rheims had a curious law forbidding structures for residence purposes to be higher than the eaves of the cathedral. It is recorded that when the building was going up the sexton was enjoined to look out daily from the portholes in the eaves to see that the structure was not being built higher than the level of his eyes.

All nations thus acknowledged their obligation as to proper housing. We of the twentieth century have a broader, more intelligent realization of this social indebtedness. Native traits and social facts are expressive of communities just as dwellings translate their tenants' characteristics. The essential conditions of wholesome family life are health, character, intelligence, industry, frugality, mutual affection and forbearance and, finally, the means to provide *private* environment for the growth and maintenance of these qualities. Union of purpose and interest are scattered when the soundness of family life is broken into by promiscuous association. Self-sacrifice, warmth of reciprocal relations, and a proper sense of duty are lost by lack of privacy in the home. Such privacy is attainable only in



country where the broad areas, wooding, fresh air and sunshine, contribute to health and wealth. The increase and welfare of families are proven to be in line with increase in individual homes. Improved commercial conditions, with increased immigration, increase the activity of home builders and isolated country homes and cause a 1.9 per cent. natural increase of population.

The city with its individualism, thronging humanity and overflowing tenements, does not furnish good soil for the growth of the home ideal except for people of means who can avoid these conditions. Unfortunately, the toiler's home ordinarily lies in crowded districts, in manufacturing colonies, in tenements where he is powerless to modify surroundings created by the greed or ignorance of those who live to "put money in thy purse." Air, light and sunshine never enter such front and rear double-deckers. Filth and noise reign supreme. Water for drinking, let alone for culinary and toilet purposes, is often altogether wanting or inadequately supplied. Wind-ing, dark, foul-smelling halls and stairways teem with pale, rickety, dirty children, for these, or the narrow, unsprinkled, uncleaned, garbage-laden, so-called streets, are their only playground. The same unlighted passage-ways are the meeting-places of the young and older tenants unless driven by natural craving for light, warmth, amusement and even advice and good fellowship, to the brothel or saloon—the poor man's club. On hot nights our unwashed, next to naked brother is found gasping for breath either on the house-tops or on the sidewalks or cobble-paved streets. In Chicago I have seen the babes placed side by side on top of the garbage-boxes for protection from the crush of sweltering humanity. Is it any wonder that modesty, chastity, cleanliness and godliness are wanting, and that disease, prostitution, drunkenness and crime prevail? New York City during its heated term often turns on its water plugs, the rush of water down the streets temporarily cleansing and cooling its miserable, sizzling, slum denizens. Think of a thirteen-year-old high-school girl, a possible public school-teacher, who, never in the thirteen years of her life having been in a bathtub, when first placed there by a philanthropic friend, turned white with abject fear and tremblingly clung to the sides. She it was who piteously said, "How nice it would be could we have a water faucet in our house." This house, perhaps, and others like it or worse, belongs to a philanthropist who has inconsistently given millions for settlement and educational purposes. Likewise the right hand of the Corporation of New York City's Grace Church has no knowledge of what its left hand does. Such are the deplorable conditions that make families indifferent to the common proprieties of life, lead to deliberate debauchery, make the tenement-house a synonym for unwholesomeness, degradation, and a menace to republican government. Again, think of the unfamiliarity of many children with

flowers, green grass or trees and, here in Chicago, our beautiful lake. Jacob Riis tells of the boy, who, upon being taken to the country and seeing cows chew their cud, asked, "Say, Mister, who pays for all de gum dem cows chew?"

What matter if occasionally we find the bathtub used as a crib for the twins, or as a place in which to salt down the pork or store the coal.

On cold days think of people huddling and crowding in dark, vermin-reeking rooms where noise and indescribable odors prevail; where babes and food are pushed under the beds to be withdrawn as occasion demands; where contagion and death lurk; for here live the vegetable hucksters assorting their wares, and later selling them on the avenues; here also live the sweaters, furnishing the well-to-do with unclean, disease-laden garments; here live our little three-and-a-half-year-old babes sewing on labels; their mothers stitching for a starvation wage so that our thoughtless, bargain-hunting women may buy cheap underwear; here live the necktie-makers with aspirations for higher things; in fact, here live an army of makers of pants, coats, vests, buttonholes, neckties, wrappers, ladies' skirts and coats, shirt-waists, and underwear. Is it any wonder that tuberculosis, syphilis and gonorrhea run riot and, despite the high infantile and contagious-disease mortality of the slums, that diphtheria, scarlet fever, measles, whooping-cough, etc., creep into and find firm footing in our comfortable homes and places?

General, maternity, children's, seaside, and floating hospitals, foundling asylums, insane hospitals, epileptic colonies, institutions for defective and delinquent children pay both deplorable and generous tribute to such awful surroundings. It costs London alone £15,000,000 a year for sickness from bad housing. What a blot on our much-vaunted civilization are the *very existence* of laws pertaining to dependent and delinquent children. Juvenile courts and reformatories, not to speak of adult crime and jails; 80 per cent. of New York City's crimes are committed by persons who have never had a home. Read the following arraignment of Sing Sing's convict No. 315 in the *Star of Hope* and reflect. He says of the criminal of circumstance or environment: "Society's crime against this class of evil-doers is our toleration of the city slum." . . . "The accidental criminal has the recollection of better days and better things to cheer him. His memory harks back to other times and scenes. His idols may be shattered, but his ideals remain and with their aid he can fathom the depth he has fallen; and he can, with the help of God and the outstretched hands of those who love him, struggle from out of the slough of evil, back to the narrow path again. But the criminal of circumstance is denied this. His memory holds no picture of a clean, sacred home-life, no recollections of a happy childhood; but instead it is always the streets and the foul, evil-smelling brick barriers that form the background of the picture-

phantoms of slatternly women and emaciated, crying babies; miasms of foul smells and recollections of hunger, cold, drunkenness and disorder. His first recollections of law and order are indissolubly associated with the policeman, his natural enemy, the despoiler of his youthful pleasures."

The slum and tenement evil is engaging the attention of the broad-minded, thinking public of all the larger commercial centers. Lord Shaftsbury influenced England's Parliament as early as 1851 to legislate and authorize municipalities to clear insanitary areas and to provide lodging- and dwelling-houses for the working classes.

London, Glasgow, Manchester, with their model tenement-, lodging-house and suburban home system, toiler's clubs, coffee-houses, reading-rooms and social settlement have taught the world what can be done to lessen this organic disease (the tenement evil) preying upon national existence.

New York, Boston, Philadelphia, Brooklyn, Dayton, and many other American cities later assumed this civic responsibility. Notwithstanding past and present agitation there is still open flagrant violation of health laws governing the construction, equipment and care of tenements. By an absolute divorce from politics, health departments would be given larger powers to strictly enforce their regulations and to add to their resources and authority. The municipalities of the old and private enterprise of the new world have proven that model tenements pay from four to five per cent. and from five to six per cent. respectively upon their investment. A three- to four-per-cent. remuneration is received from model lodging-houses.

Such model tenements are built with outside public staircases and private halls with apartments of two light rooms, with sculleries containing sanitary wash-tubs, sinks and water-closets, properly lighted and ventilated. Artificial lighting and a hot-water supply is also added, and often common laundry facilities, as well as club-rooms and libraries. Others of these tenements also have interior parks with fountains, playgrounds and sand-heaps for the children and weekly band concerts. And, mind you, this is upon a paying basis, as well as brought within the means of the poor, three-fourths of whom are deserving and who will live comfortably if but given the opportunity. Fifty-two to sixty cents a week is the average for one room, while one dollar and fifty cents and upward will pay for the two-room apartment and scullery above described. As types the Riverside Building of Brooklyn and the Mill's Hotel of New York City show that our toilers appreciate and take advantage of facilities offered for good housing and living. In spite of the evident benefit of these model tenements they cannot compare to a detached suburban house with its atmosphere of privacy, health and real home

spirit, with flower-garden, vegetable-patch, chickens, cat, dogs, and maybe even a cow and some pigs. No small city parks, playgrounds or public baths, so necessary to crowded areas, can take the place of these things that the country furnishes.

A proletarian writes, "Bay windows and front-door bells and baths are the two civilizing agencies of the highest good to the laboring people." In the words of another the isolated home should be a landlocked harbor, a refuge, a school for building of character and of future usefulness, and, as Lyman Abbott says, is more important than the church." A place where a mother trains her boys and girls to work and help each other so that when their time comes for going out into the world they are well prepared to take up life's joys, burdens and struggles.

Suburban housing companies have demonstrated that this system is both practicable and remunerative. Suburban homes wherever and whenever possible should supersede even model tenements. Our much-respected fellow, Dr. Leartes Connor, very recently speaking of the city boy, writes, "When he would shout he must keep still; when he would run he must walk; so that we are coming to look upon the country boy who has healthful surroundings and normal development as the salvation of mankind." To reach the city outskirts and the country, the bicycle has become a cheap and important means of transportation. The much-abused trolley line is another factor of consequence. Rapid and cheaper transportation is one of the crying problems of the day. Lower rates and better service should become local political issues. Workingmen must combine and lead, not be led, in municipal affairs. He must oftener use his influence his vote, his greatest power, for the enactment and enforcement of sanitary laws as applied to labor. He must see to it that his son's and daughter's employment is made healthful and effective by sanitary environment and shorter hours; that woman and child labor, so destructive to the home, be restricted or abolished; that adequate school accommodation be supplied; that parental vacation and industrial schools supplant corrective and penal institutions; that libraries, clubs and social settlements dislodge the dive and saloon. Let him become an active power for good in his own immediate neighborhood. When leisure and prosperity come, let him not be indifferent to his civic duty that after all so nearly concerns his private comfort. The most hopeful sign of the age is the widespread knowledge and interest in the present and our fellow-man, rather than in the future and in our own future state.

**Disease in Alaska.**—Reports from the Interior Department indicate that la grippe, pneumonia and measles have been epidemic all summer among the Eskimos. These ravages have extended from the Aleutian Islands to Point Barrow.



# GASTROPTOSIS WITH SPECIAL REFERENCE TO A NEW MECHANICAL SUPPORT.

By H. W. LINCOLN, M.D.,  
OF BROOKLYN;

GASTROLOGIST TO THE BUSHWICK CENTRAL HOSPITAL AND TO THE  
BUSHWICK AND EAST BROOKLYN DISPENSARY.

THE following is offered for publication to reiterate the good results derived from a form of mechanical treatment in gastropototic cases spoken of by Rose in his very interesting and exhaustive paper on Glénard's disease, appearing in *The Post-Graduate* for March, 1900.

Gastropotosis is a prolapse or downward displacement of the stomach. Mathieu speaks of the condition not exactly *per se*, but in connection with the general displacement of the abdominal organs. We owe much to Glénard for our knowledge of this condition, more particularly to the original recognition, diagnosis and treatment of gastropotosis. Although spoken of earlier, this author first directed public attention toward splanchnoptosis and indeed to gastropotosis. As stated by Rose, it occurs independent of other ptoses, and much more frequently than is admitted by many. The stomach *alone* more often lies more deeply than does one kidney. Of course, I do not mean that the entire organ, like the kidneys, is "floating," for the cardiac orifice must needs remain *in situ*.

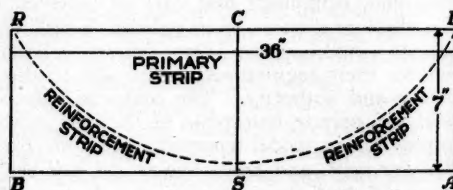
That gastropotosis may exist for many years with no manifestations whatsoever is well known. As a rule, however, sooner or later, we are confronted with the complaints of patients in whom a careful examination, both physical and interrogative, will reveal a gastric displacement.

As to the etiology of this affection, I cannot do better than quote Dr. Rose. "(1) Constitutional Defects: Those feebly nourished, especially if compelled to spend many hours of each day upon the feet; tuberculously inclined subjects, kyphosis, etc. (2) Causes within the stomach: Motor insufficiency; pyloric tumor (causing retention) or growth anywhere in the organ causing ptosis by weight. (3) Causes without the stomach: Tumors of the liver or spleen; enlargement of the abdominal space. Here the well-known post-puerperal or Landau cases are to be classified and they form a large proportion of the cases of gastropotosis. Failure to properly bandage the subject after confinement plays a prominent part in the causation of this condition. A somewhat similar condition attains in the male upon the sudden reduction of flesh after the cure of obesity. Corsets and waistbands, skirt strings, etc., greatly aggravate, if they do not contribute to the cause of gastropotosis. Stiller's symptom, *i. e.*, floating tenth rib, recently under discussion, if universally present, would enable prophylactic treatment in many cases. This would accomplish much for these people. Stiller maintains that it occurs in all cases which present fallen stomachs and in many patients without such, but in the latter he claims that sooner or later we will find evidences of splanchnoptosis or gastropotosis. It

is needless to say that this theory is both supported and contradicted with equal vigor. Chlorosis and anemia play important parts in the etiology of the malady under consideration.

**Treatment.**—All pressure at the waist should be removed, as this aggravates the abnormality. The clothing should be suspended from the shoulders. Investigate the gastric, intestinal and bowel functions and arrange a diet accordingly, increasing the latter even to forced feeding. These patients must be nourished to the very highest point. The gastric secretion, in the majority of cases, is hyperchlorhydric, hence a good, full, ordinary, wholesome diet will be acceptable. In some of the severer types the Weir Mitchell rest-cure may have to be resorted to from the beginning. In the treatment of the constipation which is so often present, sweet-oil enemata have yielded me by far the best results. Exercise, electricity (internal and external), massage and hydrotherapy are useful adjuncts. In extremely nervous individuals some bromide preparation is of service; if there is anemia, iron is indicated. To overcome anorexia, condurango, nux vomica and quassia, in combination, have a happy effect. Tannate of orexine may

FIG. 1.



Pattern.

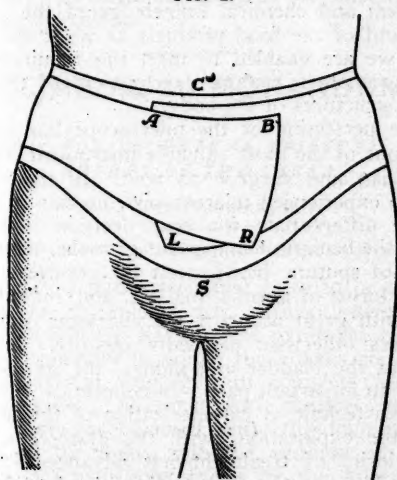
also be used. This, I believe, comprises the usual deviations from the normal, which, if corrected, increase the body weight, muscular and nerve energy and, hence, tend toward a readjustment of the equilibrium of the abdominal organs.

With reference to the mechanical treatment, abdominal binders and supporters of various kinds have been advocated. Some are supplied with an extra "pad" for the special support of the right kidney, the one most often out of place. The tendency of each and all of these devices (unless laced too tightly for the comfort of the wearer) is to slip upward, thereby exerting precisely the pressure which we wish to obviate. The plaster already spoken of becomes to all intents and purposes a part of the patient and may be applied much more snugly than any bandage and still be agreeable to the wearer. It consists, as shown in the cut, of a piece of ordinary rubber-plaster, 36 inches long and either 12 or 7 inches wide, according to the size of the individual. The latter width I find better in most cases. It is cut following the dotted line L. S. R. The pieces L. S. A. and R. S. B. serve as reinforcement pieces to be spoken of later. Having the body stripped from the level of the umbilicus to the hips and with a third person to assist if pos-



sible, apply point S. in the median line one or two inches above the symphysis, the line S. C. should lie directly over the median line of the abdomen. Having your assistant support the patient on the right side, apply the plaster included by C. S. L.; then with the support at the left, apply in like manner C. S. R.; draw as taught as possible during application. The two ends of this plaster will overlap at the back of the patient. As to the reenforcement pieces which in reality are the most essential of this mechanical device, apply L. an inch or so to the right of S., running the edge L. A. vertically up over the already applied plaster. Pull with great force toward the patient's left as L. S. A. is adjusted; apply the third piece to the right side in like manner. These two pieces will meet or overlap at the patient's back. Trim the edges in the regions of the hips and umbilicus if necessary. The lower abdomen is now firmly and comfortably sup-

FIG. 2.



Support Applied.

ported, and many patients will at once express relief, more particularly those complaining of pain in the back, dragging sensations, nausea, vertigo, etc. Landau cases as a rule do well with the usual binder, but even here I have had some excellent results with the method described. This form of brace may remain intact for from five to ten weeks, according to the time of year, diaphoretic propensities of the patient, etc. The dermal irritation is slight and even this may be obviated by the employment in conjunction with the rubber plaster of a form of zinc plaster recently imported from Germany. At the clinic of the Post-Graduate Hospital this support has been used in over fifty cases and I have employed it in upward of thirty cases in private practice. Of the dispensary patients I recall but two in whom the results were not gratifying. One patient removed the plaster within twenty-four hours. In outside work I have yet to meet the first unsatisfactory result.

113 Hancock Street.

### THE ADVANCES IN MEDICINE.

By MARTIN M. KITTELL, M.D.,  
OF KINDERHOOK, N. Y.

IN addressing you as President of the Columbia County Medical Society, which honor you saw fit to confer on me at our last annual meeting, for which I thank you, Gentlemen, I can find nothing more suitable than a brief review of the past, particularly as the nineteenth century is closing and we are soon to enter the much talked of twentieth. For want of time in preparing so broad a subject, also the trespass upon your time this afternoon, I cannot give a review of the past in detail, neither shall I attempt to handle the subject of the scientific present at any great length, for it is inexhaustible in its more perfected profession. Neither shall I make my remarks in the form of criticism of past treatment, nor of those who may adhere to methods which I might deem as obsolete; for after all good results are the foundation of steadfastness in our methods, and we are inclined to hold fast to that which has served us well.

Of the eruptive diseases little can be said concerning the improved method of treatment, as they have been and are still recognized as self-limited diseases, and can be but little influenced in their course. However, I think we are more keen to observe and ever to be on the alert for complications that may arise and prove more serious than the original disease itself; for instance, measles was once thought to be an insignificant illness of childhood, almost essential to the child's existence. Now we recognize the complications that change the aspect of the case. The frequent complications are bronchitis, bronchopneumonia, and even tuberculosis might be traced to the severe complicated measles. In scarlet fever it is necessary to watch carefully, even in the most mild cases, for the scarlatinal nephritis and also otitis media which have made it our duty to use the antiseptic sprays in all cases of scarlatinal angina. However, I may state that in my own observation the character of the epidemic has much influence on the complications of the cases; for, in treating several cases last fall and having other cases come to my notice only at the stage of desquamation, in which no treatment or even care or prudence has been observed, complications have not arisen up to this time.

Diphtheria, a disease which has been long recognized and has had a high mortality-rate through all ages, was most ably described as long ago as 1770 by Samuel Bard of New York; and it was later recognized by Pierre Bretonneau of Tours that the angina suffocata, cyanche maligna, and the putrid throat were one and the same disease—diphtheria. It can readily be appreciated that, with a disease causing such destruction of life, the minds of the physicians were sorely taxed, and a great diversity of opin-

<sup>1</sup> President's Address to the Columbia County Medical Society, Hudson, N. Y., May, 1900.

ion and method of treatment prevailed. With some it seemed that the most important thing to do was to remove the membrane and many ways were resorted to in order to reach that end, application and insufflation of digestents or solvents, even forcible removal by mechanical means, regardless of the bleeding absorbing surface left, for more rapid invasion of the toxins, the result of this procedure. But happily within the last decade we have had introduced, established and lauded by almost every physician throughout the land a preparation which Germany can have the credit of bringing into prominence, diphtheria antitoxin, which at this time needs no further mention. I am more convinced with each new experience that to get the best results, we must use it early and in maximum doses. We should not content ourselves with this alone, for it is important that the antiseptic sprays and douches are used, and the early use of stimulants is also necessary. In a small percentage of cases the intubation set of O'Dwyer must be used to save life. This invention, as perfected by the last-named gentleman, has caused to be impressed in the memory of the profession to-day far more than a monument of stone of the life and existence of Dr. O'Dwyer. One of the greatest benefits to the public has been the recognition of the contagious and infectious character of these diseases, the quarantine regulations adopted, and most rigidly enforced.

In the treatment of pneumonia, from blood-letting, depleting cathartics, closely confined room, almost stifling, to avoid catching more cold, a complete swing of the pendulum has taken place during these years of experience and careful observation in the use of cold applications, cold sheet bath, large, well-ventilated rooms, and the conservative saving of the strength of the patient and the early use of stimulants and cardiac tonics. However, I may state that for a few selected cases, venesection might be indicated and is advocated by some writers. During the early part of this century the profession bled too much, and possibly in the last two or three decades we have bled too little.

It took the profession some time to define typhoid fever as a distinct disease, with constant pathological changes, and the profession was also some time in recognizing the fact that it is not a disease to be wholly, in part, or even at all treated with medicines. Careful nursing, well-selected diet, cold sponge or tub-bath, with a well-ventilated room, form the most essential régime for an uncomplicated case. Of the complications that may occur, and are sometimes numerous, I will not speak, as the symptoms arising usually dictate some remedy to correct the existing evil.

With a more thorough knowledge of the anatomy, physiological functions and localization of the special nerve centers, the diseases of the nerve centers, the diseases of the nervous system

and injuries to those organs are more intelligently treated, tumors located, and in many instances successfully removed. Surgery of the brain, through this knowledge, has made rapid strides in the past decade. For diseases of the spinal cord, hemorrhage and injuries, laminectomies and other operations have so early reached the point of perfection in surgical art that so-called broken necks are not without hope of recovery.

In the obstetrical field the same progress has been made, more pronounced, however, in the irregular or abnormal cases of labor, incomplete abortion, and puerperal eclampsia, where active surgical intervention saves many lives and diminishes the number of cases of chronic endometritis, with extension of disease to the tubovarian structures with possible lifelong invalidism. Artificial feeding of those infants who are unfortunately deprived of Nature's food has been much improved by the great increase in our physiological and chemical knowledge of the stomach, and of the food products as well; through such we are enabled to meet the requirements that promote a healthy development of the various structures of the body.

The perfection of the microscope has placed it as one of the most valuable instruments to the physician and surgeon as well. In the hands of the experienced microscopist, he can at short notice differentiate for your decision in treatment the benign or malignant growths, the character of sputum, blood-count for pernicious and other forms of anemia, malaria, and, indeed, define with great accuracy the character of many diseases otherwise decidedly obscure. In disease of the bladder and kidney, the microscope plays an important part. In connection with the modern technic of catheterization of the ureters and the explorations with the cystoscope, our superiority of treatment has advanced largely through our more accurate facilities in differentiation and diagnosis of these diseases. From the rude, painful torture in surgery, healing wounds by suppuration and granulation in years past, we have reached the period of painless surgery, due to the discovery and application of anesthetics by Dr. Morton of Boston in 1846, and of the healing of wounds, either accidental or surgical, by primary union through the discovery of antiseptic and aseptic surgery by Lister, and of the practically bloodless operations, even that of amputation of the hip-joint by John A. Wyeth. Innumerable operations for various pathological conditions that in years past were not recognized or differentiated are now known and remedied.

Before closing I must pay a high tribute to those of the profession who several years ago were and to those who are now engaged in the separate and special fields of professional work. To them we can feel under great obligations for the abundance and excellent character of the literature and scientific reports, the result of long



and careful investigation. We have also their wise council at our disposal which enables us to be better fitted for the variety of diagnoses and the treatment of almost all the special branches, which we must represent and embody as a whole for our study and practice.

Our field of labor is too small and sparsely populated for us to become specialists, but we must and do equip ourselves very creditably indeed for the range of our opportunities. We can look into the past, and meditate on the present, and justly feel proud of our profession, that it is keeping pace with other scientific pursuits, embracing and making use of mechanical ingenuity, in the manufacture of instruments, the X-rays, electricity and photography. What our progress will be in the future it is difficult to predict; but that the Columbia County Medical Society may grow strong and prominent in the professional advancement for the mutual benefit of its members and the public, whom we collectively represent and serve, is the sincere wish of your president.

## CLINICAL MEMORANDUM.

### MUSICAL EQUIVALENTS IN EPILEPSY, WITH REPORT OF TWO CASES.

By L. PIERCE CLARK, M.D.,  
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FIRST ASSISTANT PHYSICIAN, CRAIG COLONY FOR EPILEPTICS.

EPILEPTIC phenomena that seem to be of the nature of equivalents are always interesting. Sante de Sanctis<sup>1</sup> has recently given the history of two epileptics in whom the attacks consisted of paroxysmal singing with complete loss of consciousness. At times such musical equivalents were accompanied with rhythmic movements of the body, with the addition of some clonic muscular convulsions of the lower extremities. At other times the equivalents consisted of singing street songs, songs of passion and religion. During these singing equivalents different erotic attitudes and movements were in evidence, and portions of the body were exhibited with impropriety.

A. Christiani<sup>2</sup> also reports a musical equivalent in an epileptic man twenty-two years of age. They consisted in singing a single tune, an aria or a song accompanied by rhythmic movements imitating an orchestral direction. The type of the equivalent did not change and was followed by complete amnesia.

Attacks of the musical equivalent as well-marked as these just cited are not common to the experience of epileptologists, and are sufficiently rare to warrant report when found. I believe both of the above authors were as sharply alive to the possibility of these musical equivalents being of hysterical origin as I have

been in the two cases which I am about to report; somewhat similar phenomena as herein reported in epileptics are fairly common to the experience of most observers of major hysteria.

A. McD., man, forty years old. Epilepsy of grand mal idiopathic type; patient is feeble-minded. Some time after admission to the Colony and while under examination by me, he had a severe typical grand mal seizure. Some two or three days later, while sitting in my office in conversation with me, he suddenly said, "There, I feel it running to my head," indicating with his hand the seat of the sensation in the epigastric region (epigastric aura). Almost at once the patient sat up straight, then fixed his eyes on the wall over my head and began to sing a gospel tune with improvised words in a very loud voice. The quality of the singing was even better than in his normal state. The body remained rigid and fixed throughout the singing, which lasted about thirty seconds. After some twenty seconds he sung in a lower voice and with not quite the same zest as at the start; perspiration poured off the face in streams and the face became very red, apparently from the exertion of singing. The musical attack ended abruptly and the patient said suddenly, "I'm all right now," but seemed somewhat depressed. He had no knowledge of the attack whatever nor a remembrance of having spoken of the aura. Within a few minutes he became so stupid as not to be able to converse and was placed in bed. In a few seconds he was in so profound a sleep that he could not be awakened. In an hour he was up and about the house as well and cheerful as ever. He did not remember having said anything after the attack, in what appeared to be a conscious state at the time. He always looked dazed when any one asked him about these musical attacks, as though they were beyond his comprehension and were not connected with his "sickness" (epilepsy). These equivalents occur weekly; grand mal attacks occur about once per month. Occasionally he has been known to change from one tune to another; but they have all the same improvised words of a religious character, with complete amnesia.

A. B., girl, twenty years old. Epilepsy began December 16, 1898. All attacks prior to her admission to the Colony, October 1, 1899, were of the musical equivalent variety, except two, which were grand mal in type. For a long time these attacks were thought to be hysterical in character; but later were diagnosed as epileptic, and her admission to the Colony was secured forthwith. At the beginning of her disease, patient had as many as thirty or forty attacks in twenty-four hours. These attacks were preceded by the epigastric aura and a sensation of dizziness; loss of consciousness was complete in the attacks. At the end of the convulsive series, the patient always complained of feeling weak and slept for several hours. While in these singing attacks patient kept up a slight oscillation of the head and stared fixedly in space. Occasionally the

<sup>1</sup> Riv. quindicin. di Psicolog., etc., VI., p. 91.

<sup>2</sup> Riv. quindicin. di Psicolog., etc., VI., p. 129.



patient also had attacks of angina pectoris complicating the singing equivalents and existing separately from them; the combination of epileptic phenomena of musical equivalents and angina pectoris has never before been reported as existing in the same case. After admission of patient to the Colony, it was learned that several members of the patient's family had died of heart disease, and three sisters have occasional attacks of angina pectoris. Undoubtedly this hereditary predisposition determined the cardiac equivalent in our patient.

Some of her muscular attacks witnessed by me are as follows: Patient suddenly has a loss of consciousness while sitting or lying down, by day as well as night. Then the patient at once begins to sing a religious tune, sometimes improvising and sometimes following the words of Gospel hymns. The words and tune are always correct and very well rendered. Patient has a very good voice and is considered an unusually good singer for one whose voice has not been properly trained. Usually there is a good deal of bodily restlessness, during which the patient sometimes assumes a passionate attitude, and occasionally there is some arching of the back. On rare occasions patient has been partially cataleptic while in musical attack. The paroxysms of singing would generally last for twenty to forty minutes. For a day or so before the musical series she is inclined to be apprehensive and rather despondent. On the day following the series patient is bright, cheerful and industrious. During the past four months she has had anginal attacks. I have witnessed several of these; they usually begin with a premonition, consisting of sharp, darting pain in the pericardial region, followed shortly by unconsciousness. While the attack is on the patient is pale and profuse perspiration occurs; pulse is small and pupils are dilated. Usually there is no bodily restlessness, although the muscles are rigid and in a condition of considerable tension. One would think that the patient was in a condition of syncope, if it was not for the fact that every two or three seconds there are sharp expiratory cries—a sort of shrill laryngeal sound, something like the squeaking of mice or the shrill piping of the elephant. The attacks usually terminate voluntarily in one minute, although by the exhibition of nitroglycerin and nitrite of amyl the anginal equivalent seems to be cut short somewhat. There is complete amnesia following attacks. Patient does well under the administration of bromide and attacks are now much less frequent than formerly. She is an especially bright, capable girl and has no stigmata of hysteria, nor even those commonly seen in many epileptics.

## MEDICAL PROGRESS.

**Laryngitis and Asthmatic Paroxysm.**—It is now generally admitted that asthma is a vaso-

motor neurosis and that the paroxysm is provoked by some peripheral irritation of the sympathetic nerve. Experience has shown (W. C. Glasgow (*N. Y. Med. Jour.*, August 25, 1900)) that in a majority of cases this irritation lies in the upper portion of the respiratory passages. The posterior surface of the turbinates, the interarytenoidal commissure, the posterior surface of the trachea, and the membrane at the bifurcation of the trachea have been shown to be the most sensitive areas of the respiratory tract, and it is unquestionably an irritation of one of these areas which produces the symptoms of reflex cough. The interarytenoid commissure seems to be the site most frequently affected and this can easily be treated by local applications. The constitutional treatment consists of the usual administration of potassium iodide and antispasmodics. Locally he applies carbolyzed iodine to the larynx and pharynx by means of a soft brush and finds it successful, partly through its anesthetic action, and also on account of its local stimulating effect.

**Clinical Significance of the Diazo Reaction.**—Honig (*Klin. therap. Woch.*, August 5, 1900) sums up the important facts concerning the diazo reaction as follows: (1) The reaction may occasionally be obtained in a great variety of diseases; it is found constantly, however, only in typhoid and measles and to a less degree in tuberculosis, where its presence does not by any means indicate a fatal prognosis, as has been asserted. (2) In typhoid it is probable that the typhoid toxins are absorbed through the damaged intestinal walls and are then excreted through the kidneys in an altered form upon which the reaction depends. (3) In typhoid the degree of the reaction stands in proportion to the severity of the disease. (4) Absence of reaction in typhoid is a favorable sign pointing to early convalescence; if it suddenly returns, a recurrence is to be anticipated. (5) Various drugs sometimes cause a similar reaction distinguished, however, by its less intensity and by the absence of a green precipitate.

**Statistics of Bottini's Operation.**—Freudenberg (*Arch. f. klin. Chir.*, Bd. LXI., p. 941) has collected reports of 683 patients operated upon for prostatic hypertrophy by Bottini's method. There were 38 deaths, a mortality of something over five per cent., but if one leaves out some deaths which were not directly attributable to the operation, the mortality would be only a little more than four per cent. In only six per cent. of the cases was the operation pronounced a failure, while in a third of the remainder it was stated that there was an improvement, and in two-thirds that there was a cure. Freudenberg uses the word "cure" in this connection to indicate that the patient was no longer obliged to use a catheter, but he has no means of knowing that all the operators who reported cases used the term in as strict a sense. But even if the figures cannot be taken too literally as showing the exact

percentage of "cures," the numbers are great enough to show that in a large majority of instances the condition of the patient was much improved. The writer gives some points which he has found to be of practical value. The bladder should be moderately distended with air strained through cotton before the cautery is passed. In cutting backward the finger in the rectum should be the invariable guide to the operator. Bottini's first practice was to leave a catheter in the bladder. Recently he has given up this practice, but Freudenberg advocates it in all cases in which there is hemorrhage, or foul urine, or in which it has been necessary to pass a catheter very frequently or in which its passage is attended with difficulty. In general he considers the operation the most important one which has been brought forward for the treatment of prostatic hypertrophy.

**Tubercle Bacilli in Nasal Cavity.**—On account of the prevalence of tuberculosis and the carelessness with which the excreta from such individuals are handled, it is reasonable to suppose that the atmosphere is frequently laden with large numbers of virulent tubercle bacilli. N. W. Jones (*Med. Rec.*, August 25, 1900) has published the results of numerous experiments made to demonstrate the presence of bacteria in the pharynx and nose of healthy individuals. After thorough cleansing of the nasal cavities they were washed with sterile salt solution which was subsequently injected into the peritoneal cavity of a guinea-pig. Thirty-one inoculations were made. Twenty-two died from acute pulmonic lesions of unknown origin as no organisms could be found. Three died of or with tuberculosis, nearly ten per cent. A series of experiments by Straus is also mentioned, in which, out of twenty-nine similar experiments upon persons supposedly healthy, but connected with hospitals in various capacities, the guinea-pig thus inoculated died of tuberculosis in nine instances. The author concludes that virulent tubercle bacilli are to be found in the nasal cavities of healthy persons in the ordinary walks of life, but not so frequently in these persons as in those who have the care of the tuberculous patients.

**Iodipin in Syphilis.**—In the advanced stages of syphilis, where iodide of potassium is indicated, Holzhauer (*Therap. Monatshft.*, August, 1900) likes the action of iodipin and is surprised at the rapidity with which gummata are brought to absorption. He injects a thick, oily fluid containing 25 per cent. of the drug by means of a special syringe with long and wide cannula introduced underneath the tissues of the back. The fluid must be warmed before injecting. Pain or supuration has never followed this method, which affords a convenient way of saturating the system with iodine without upsetting the stomach or affecting the skin. Iodipin may also be given by mouth and patients generally prefer its taste to that of the iodides.

**Transplantation of Perichondrium.**—Von Mangoldt (*Arch. f. klin. Chir.*, Bd. LXI., p. 955) narrates two successful cases of the grafting of perichondrium of a rib to give support to a flap used to cover a laryngeal defect. The method of operating was as follows: A bit of the cartilage of the eighth rib an inch in length was excised, split in half and planted under the skin in the neighborhood of the defect, at such a distance from it that when a flap should later be cut to remedy the defect, this flap should contain the cartilage. The pieces of cartilage healed in their new situation without reaction, and six months later the reparative operation by means of flaps was successfully carried out. It was shown by a histological examination, and also by the continuance of the cure for more than a year, that the transplanted cartilage maintained its integrity.

**Compression of Pedicle of Movable Kidney.**—E. Reymond (*Revue de Chirurgie*, June, 1900) reports the case of a woman, aged thirty-eight years, with a negative antecedent history, who sought hospital treatment because of intense pain in the right flank; this had rapidly become so great that she had fever, irregular pulse, vomiting and prostration; examination revealed a swollen, distended abdomen, with an irregular, hard tumor in the region of the gall-bladder; *jaundice of the skin was absent*; on deep abdominal palpation, which was difficult, a second tumor was found, below and to one side of the first tumor, having a dulness continuous with that of the liver, and extending well down to the umbilicus and laterally to the median abdominal line. This second mass was movable, being especially displaced by deep respirations, and having a consistency more homogeneous and a form resembling that of the kidney. The absence of jaundice complicated the diagnosis, as the majority of the symptoms were renal rather than otherwise. Lumbar incision revealed a kidney, double its normal size and somewhat discolored; the hand passed about the pelvis of the kidney disclosed a tumor, hard and irregular, giving the sensation of a distended gall-bladder, which corresponded in size and location to the anterior tumor already described. Nephropexy was now performed, and a few days later a cholecystotomy resulted in the evacuation of about 60 grams of purulent fluid, and the removal from the gall-bladder of four biliary calculi, one of which was the size of an egg. The gall-bladder was drained in the usual way, and the patient made an uneventful recovery. A culture from the fluid removed from the gall-bladder showed the presence of the bacillus coli communis. The symptoms, therefore, were due to a double cause; the general symptoms were due to the gall-bladder conditions, while the abdominal pain and diminution of urine were due to the distention and displacement of the kidney.

**Cancer of the Large Intestine.**—R. De Bovis (*Revue de Chirurgie*, June, 1900) gives an ana-



lytical review of 426 cases, collected from all known sources. The most frequent varieties are carcinoma, epithelioma, sarcoma and lymphadenoma. Cancer of the large intestine occurs about once in two thousand five hundred cases of illness, but in hospital mortuary statistics it averages one for every three hundred deaths. It occurs more frequently in males than in females; the greatest number are seen between the age of forty and sixty years, and is rarely seen in childhood; out of thirty-five cases between the eleventh and the thirtieth year, twenty-three were females. Cancer of the large intestines is probably more frequent than cancer of the rectum; cancer of the small intestines is rare; the seat of large-intestine cancer is usually at the ileocecal region. The cause of this affection is not definitely known; heredity, syphilis, alcoholism, trauma, chronic diarrhea, habitual constipation, and dysenteric ulcers predominating as causative factors. Usually the cancer is annular in form; but seldom is it lateral; then it is apt to be a tumor of large or small size, which mechanically, by traction, favors invagination of the intestines. The annular form may be either scirrhous or colloid, generally the former; this causes a stenosis of the lumen of the gut, giving rise to an "hour-glass" constriction which eventually leads to a hypertrophy and a dilatation of the intestine above the constriction, with a concomitant atrophy and narrowing of the lumen of the intestine below the strictured area. This inequality of the lumen often militates against a rapid and easy anastomosis at the time of the operation. As the disease progresses, there is evidence of adhesion to the abdominal walls, or to the abdominal viscera, *e. g.*, the pancreas, spleen, ovary, or bladder; ascites may or may not be present; suppuration is apt to occur as the cancerous ulceration extends and involves the mucosa of the intestines; thus giving rise often to the so-called vegetations found in cancer of the intestines; the suppurative process may extend, involving the walls of the intestines, then we have perforations with the usual sequelæ, peritonitis, sepsis and death. Rarely the mesenteric glands become the seat of secondary deposits, as may all other abdominal organs; the liver is, however, the most usual site of secondary deposit.

**Treatment of Abortion.**—The principles of treatment in abortion and its complications are, writes H. B. Stehman (*Medicine*, August, 1900), to render vulva, vagina and uterus aseptic and as far as possible to keep them so, to arrest hemorrhage either by tampon in cervix or vagina or by emptying the uterus, to remove in inevitable abortion the ovum or any part of the product of conception as early as possible, and, when circumscribed local infection is detected, to evacuate the pus early and by the shortest route. Intelligent curettage, preferably with a large sharp curette, is indicated whenever a vestige of placental decidua remains or there is suspicion of infection, and a bacteriological differentiation

should be made as an aid in prognosis and treatment. After curetting, packing the uterus moderately tight with gauze stimulates uterine contraction so that any undetached decidua is separated and adheres to the gauze. Frequently curetting is not necessary and intrauterine irrigation is all that is required.

**Radical Cure of Hernia.**—F. D. Bird (*Lancet*, August 4, 1900) says that the typical and meritorious Bassini operation should be modified in each case to suit any conditions unexpectedly encountered; for example, the reduction of the size of the cord by the removal of some of the veins is very efficacious. In general the operation is practically an abdominal incision. The latter should be as small as possible, need not extend quite as far as the external ring, but had best go a little beyond the internal ring, thus avoiding many blood-vessels in the skin over the external ring and remaining in an area where the tissues separate readily into planes. Poupart's ligament partakes of the characters of a bony ridge for all practical purposes and should therefore be avoided. The incision should be at least one inch above it and planned as above stated. The objective point of all herniæ is the point of exit of the rupture, which in the majority of inguinal cases is the internal ring. A scar interfering with the groin fold is certainly a disadvantage and hence the skin cicatrix should be as far as practicable away from the groin. In young subjects, and especially in recent herniæ, the deep layer of superficial fascia is of importance only to furnish blood supply to the aponeurosis. Hence, instead of separating them, they had best be incised together. In old cases, and particularly in rupture of long standing, this layer will be greatly thickened and may be used as an additional support, therefore it had best be divided nearer Poupart's ligament than the aponeurosis. The division of the aponeurosis is the next important consideration. If search be made a line will be usually found along which the fibers may be separated and only the intercolumnar fibers cut near the external ring. This most important of all the structures, the external ring, should be preserved when possible. By carrying the separation of the fibers laterally to the internal ring this may often be done. Or the line of separation may be chosen above the level of the ring, but this method is less desirable. The internal oblique fibers vary greatly, being dense and close over the cords, making one wonder how a hernia ever came through; from this condition they may grow less and less until without attachment to Poupart's ligament. When possible the cord should not be torn entirely from its bed, but lifted out over the external half of the canal only sufficiently to cause tension; the sac is then brought into view and its removal facilitated best by beginning above and near the internal ring and along the lower margin of the sac.

**Therapeutic Value of Urotropin.**—Seppan



(*Wiener med. Blät.*, July, 1900) finds that in the cystitis of, prostatic hypertrophy, in pyelitis and pylonephritis, in atrophic prostatitis, in neoplasms of the bladder, in stricture, and in all other mechanical conditions causing a retarding of urinary flow and consequent bladder retention, urotropin is an almost infallible remedy, rendering the urine bland and relieving the local congestion. The most obstinate cystitis yields to treatment when, with the usual bladder irrigation, urotropin is administered internally. An improvement in the symptoms is noted in a few days. The usual dose of urotropin is from five to seven grains thrice daily.

**Hammer Toe, Hallux Valgus and Hallux Rigidus.**—Concerning the pathology and treatment of hammer toe, W. Haward (*Lancet*, July 28, 1900) raises the following points. The lesions in the order of their establishment are: Hypertension of the metatarsophalangeal articulation by contraction of the extensor longus hallucis; flexion at the first interphalangeal articulation; pressure of the ungual phalanx upon the ground; hyperextension of the distal interphalangeal articulation; hypertrophy of the soft parts and of all the joints; corn-formation upon the proximal interphalangeal articulation, now very prominent and raised high above the level of the other toes; bursa-formation beneath this corn; inflammation of the corn and the bursa by pressure attrition or traumatism; troublesome cellulitis by infection of either or both. The tendons are changed, the extensor shortened, the flexor is shortened but follows the retiring angle, the lateral ligaments are thickened and abbreviated and the joint-surfaces altered by the pressure. The toe usually affected is the second. A neurotic affection of the toes simulates this, but is distinguished by its presence in all five digits, its comparatively mild degree, and its disappearance under straightening and return when traction is removed, and its occurrence in conjunction with neurasthenia, faulty circulation, etc. Such cases are treated locally by massage, passive and active exercises, electricity, and systemically by tonic, hygiene and dietetic means. For the true hammer-toe the indications are relief of cellulitis and bursitis if present; amputation through the metatarsophalangeal joint in the bad cases, resection of the head of the proximal phalanx with removal of the lateral ligaments in the average case; division of the extensor tendon, of the lateral ligaments and of any other resisting bands in mild cases. The after management consists in proper splints, boots and exercise. Hallux valgus has these lesions, *vis.*, eversion of the great toe, partial inward dislocation of the metatarsophalangeal joint, shortening of the extensor tendon, atrophy of the joint cartilage in old cases, development of callus and a bursa over the joint, often bursitis, cellulitis, etc., added. Its best treatment is division of the tendon and excision of the bursa and the joint for marked cases, and division of the

tendon alone for the recent cases. Splints, digitated stockings, pads and boots complete the process. Hallux rigidus seems to be joint fixation without ankylosis or change. Its treatment is excision of the metatarsophalangeal joint.

**Doyen's Appendectomy.**—A. A. Warden's preference (*Lancet*, August 4, 1900) as to technic for the removal of the appendix is what he terms Doyen's. Its details are: (1) Crushing of the base in a Doyen clamp, or any other which will occlude the lumen for a quarter-inch; (2) silk ligature about the clamp furrow; (3) cautery division of the organ and burning of the stump down to the ligature; (4) purse-string suture about the stump; (5) while this is tightened, the stump is invaginated into the lumen of the bowel; (6) secondary purse-string suture invaginating the first. The advantage of this method is that the lumen of the diseased organ is never once opened and its stump becomes part of the intestinal contents or drains into its canal.

**A Case of Actinomycozosis.**—E. T. Jones and C. T. Mackey (*Lancet*, July 28, 1900) report the following notes: Male, forty-two years old, traction engine-driver for a threshing machine, November, 1898, stump of tooth removed, swelling followed but subsided under treatment; in December it recurred, with great pain, rapid growth, bulging into mouth and superior cervical triangle, thickening, displacement and deviation of the tongue to the opposite side, redness, induration and edema of the skin, areas of external softening here and there. The treatment was incision, evacuation, curetting, cauterization with 1 to 3 carbolic acid of the foci as they appeared, and the administration of very large doses of potassium iodide. Cure followed after a long tedious course.

**A Case of Congenital Hypertrophic Pyloric Stenosis.**—This condition, usually acknowledged as surgical, appears to be not very uncommon. E. Cantley (*Lancet*, July 28, 1900), who records this case, presented in 1898 a series of seventeen cases in literature, two others of his own and one specimen from the St. Bartholomew's Hospital Museum. Since then eleven others have been recorded, making the presented total of undoubted cases thirty-two. The following is the meager history: Female, three months old, died the day after admission; healthy parentage; full term, normal birth; four other living healthy children; cow's milk and barley water for the first six weeks; much vomiting; then condensed milk much diluted; meat-juice and whey for two days before admission; great constipation and occasionally small, fluid, green movements with fecal matter intermixed; emaciation. On admission, weight 6 lb. 3 oz.; convulsions; normal temperature; persistent recurrent vomiting; no bile in the vomitus; five defecations as above; convulsions recurred; temperature rose to 105° F. and death followed. Necropsy. Much emaciation, dilated, separate houses, preferably in the suburbs or

thin-walled stomach, enlarged, thickened, tumor-like pylorus, lumen admitted probe, but blocked flow from the stomach; the mucosa, as well as the musculares, proliferated, was much thickened and deeply rugose. The feature of this case is the stools. Usually these have been totally absent. The medical treatment is the use of predigested food by nasal tube and *per rectum*, while the surgical, much the better, is pylorotomy or gastroenterostomy.

**Suppurative Parotitis.**—A case of this disease is recorded by W. T. Beveridge (*Lancet*, July 28, 1900) because of the unusual course the pus followed, namely, below the zygoma and above it, well forward to the face, upward over the temporal area, and down behind the ear, where it began to point. Cure followed only when an exit behind the ear and another in the parotid were provided.

**Hydatid of the Liver and of the Left Lung.**—R. Morison (*Lancet*, July 28, 1900) says that exploratory aspiration of suspected hydatid of the lung may rupture the cyst and flood its contents over the viscus or system. This is less apt to be the case with hepatic hydatid cyst. The patient, whose history is briefly recorded, had the disease in both these viscera. Female, aged thirty years; admitted March 3, 1899, always had had a dog about the house; August, 1895, noticed pain in the right chest and shoulder with swelling, dyspnea and dysphagia; all increased markedly in December that year; hemoptysis in 1897; August, 1898, left pleurisy developed; three days later prolonged attack of cough accompanied by a copious mucopurulent expectoration; all signs, especially in the face of the hemoptysis of the preceding year, pointed to phthisis; the liver was enlarged in the right lobe and gave the hydatid thrill. This cyst was evacuated of much fluid and many daughter-cysts on March 9, 1899. Sixteen days after this a second attack of coughing with profuse expectoration containing "grape skins" appeared. On the twentieth day exploration of the left chest with the needle gave pus. On evacuating the cavity another purulent hydatid cyst was found.

**Properties in Suprarenal Extract.**—The action of this drug is so rapid that its maximum effect is reached in less than one minute, and its power so great that some obstinate cases of chronic keratitis have been cured in one treatment. Because of these two qualities it is important to know the action of the suprarenal extract, when absorbed from its local use in the eye or ear, upon other organs of the body. W. H. Bates (*Jour. Am. Med. Assoc.*, August 11, 1900) reports the results of his clinical observations and his laboratory experiments, as well as those of other observers. The conclusion at which he arrives from all the data is that no condition of organic disease contraindicates the use of suprarenal, non-septic solutions being absolutely harmless.

The constitutional action of this drug is that of a muscle tonic, acting especially upon the muscle fibers of the heart and arteries. Among drugs the suprarenal is unique in that while one-tenth of a grain has produced the maximum physiologic effect, two ounces produced no further effect. Physiologic experiments show that the excess of the suprarenal supplied for muscle-tissue is stored up for future use. It is important to remember that no result will follow its use unless it is indicated, and when indicated the benefit follows immediately. That is, while it acts upon and benefits a laboring heart, due either to stenosis of the valves or to insufficiency, and a dilated as well as a small heart, a pulse of high tension, a weak pulse, a rapid or slow pulse, or one irregular in force or frequency or intermittent, it does not affect the strong pulse of a normal or diseased heart at all. The internal administration of the drug improves the circulation when the peripheral vessels are contracted and the extremities pale, and also when they are dilated and the extremities congested. It has a selective action, the writer says, for congested tissues, as shown by the fact that in acute rhinitis the inflamed mucous membrane of the nose is whitened, after the internal administration of the drug, while the normal conjunctiva of the eye remains unaffected. The application of the aqueous solution of the extract to mucous membrane whitens the parts in one minute and a secondary dilatation of the vessels does not follow. To prepare an aqueous solution, to one part of dried powdered suprarenal in a test-tube add ten parts of a saturated solution of boracic acid and hold over a flame until it boils; then filter and boil the filtrate in its permanent receptacle. A solution prepared in this way retains its properties for months. When the drug is used locally in the form of a powder or an emulsion, the excess should be removed to prevent infection, as it decomposes quickly. In severe nasal hemorrhage, when unable to apply the drug by spray or cotton on a probe, a ten-per-cent. emulsion may be syringed by force into the nares. Do not leave tampons wet with the extract solution in the nose, as infection occurs within a few hours and causes secondary hemorrhages. It is best administered internally by placing the dry powder on the tongue and swallowing it slowly as it becomes moist. In eye and ear diseases its temporary effect may be made permanent by the use of other treatment, and so also in diseases of the nose and throat. It may be given internally, grs. v., t. i. d., in diseases of the nose and throat. Used internally and locally, it is a specific for hay-fever. It has also been used in a number of other conditions with varying success. The writer finds suprarenal invaluable in controlling hemorrhage after nasal operations. Its hemostatic properties alone make it valuable. Secondary hemorrhage is not increased by its use. Hemorrhage may be controlled by its internal administration.



**The Psychic Factor in Disease.**—A study of the cases occurring in one's private practice leads to the conclusion that many of them present aspects of a mentoneural relation which may be called *psychic*, although the term is somewhat objectionable. In an interesting article under the above heading Robert W. Greenleaf (*Boston Med. and Surg. Jour.*, August 16, 1900) cites briefly a few cases illustrating the following propositions: (1) That some cases of illness are simply neuroses without appreciable pathological lesions. (2) That causes capable of producing such neuroses may act while disease is present and should be guarded against. (3) Purely psychic causes, as shock, grief, etc., may pave the way for, if not directly cause, profound pathological disturbance. (4) Attention to the psychic is capable under some conditions of so turning the scale to health that it may arrest, even perhaps cure, otherwise fatal pathological conditions. (5) Attention to the psychic should be considered a routine measure in the treatment of delirium from toxic causes, as alcohol, belladonna, ether, etc. (6) Attention to the psychic should also be considered a routine measure in the treatment and in the prevention of delirium in febrile states, as of typhoid. (7) Nurses should be able to enter into psychic relations with their patients; otherwise the value of their services is much lessened and may be harmful. The writer cites cases illustrating each of these propositions and foresees one good result from the present fads of Christian science, mental healing, etc., in that they are emphasizing the importance of the psychic.

**Hernia in Children.**—After discussing the etiology of the different kinds of hernia which occur in children, the frequency, the diagnosis, the treatment, the results obtained, and the mortality from operation, E. A. Balloch (*Am. Jour. Obstet.*, August, 1900) draws the following conclusions: (1) Hernia is a not infrequent condition in children. (2) Of the forms of hernia, the umbilical is generally cured without operation, the femoral never, and the inguinal in from 70 to 80 per cent. of cases. (3) In view of the serious handicap in the battle of life caused by a hernia, it is justifiable and proper to recommend an operation for the radical cure in children who have faithfully worn a truss for two years without benefit or in those cases in which a truss cannot be worn. (4) The mortality from operation is less than would result from the accidents attending hernia were no operation done.

**Convulsions in Children.**—A convulsion is a symptom, not a disease. W. A. Dickey (*Cleveland Med. Gaz.*, August, 1900) discusses the causes of convulsions in children and their treatment. Of the exciting causes, he believes that many which are called "reflex" are not reflex at all, but direct. He says that the evolution of a tooth never *per se* produced a convulsion. At the time of dentition the child is usually stuffed

with all manner of food which its undeveloped stomach is unable to digest. The result is that fermentation takes place, poisonous products are formed and absorbed, there is fever, and a convulsion occurs. Those who think that dentition is the cause of convulsions at this time, lance the gum with the result that unless the tooth comes through immediately cicatricial tissue is formed which makes the condition worse than before. Stomachic and intestinal indigestion and an overloaded colon bring about the formation and absorption of ptomains, which, circulating through the system, are followed by fever and convulsions. This autoinfection is a direct cause and the most potent factor in the production of infantile convulsions. An adherent prepuce and the presence of intestinal parasites are also causes, while in the acute infective diseases a convulsion not infrequently takes the place of a rigor in adult life. Scarlet fever is almost always ushered in with a convulsion. Other causes are considered briefly. As to the treatment of this symptom, the writer makes a plea against the time-honored hot bath which has been the recognized treatment, both among laymen and physicians, for all convulsions in children. He always takes the temperature of the child the first thing, and if it is 103° F., or more, and the extremities are not cool, the hot bath is not indicated, but harmful. On the other hand, a cool or cold sponge bath or pack is indicated. The child should be stripped and the whole body sponged with cool or cold water, or a cold pack applied, according to the severity of the fever. Or the child may be put into the bathtub in water at 80° F. to 95° F. with continuous brisk friction. A rectal injection of cold water is beneficial. The cold bath reduces the temperature, strengthens and deepens inspiration, and gives tone to the heart. All the functions are stimulated, with the result that the poisonous products are rapidly eliminated from the body. This treatment is not meant for all cases of convulsions in children, as cases of cerebral tumor, meningeal hemorrhage, adherent prepuce, etc., call for something else. Chloroform may be given during the paroxysm. The stomach-tube or an emetic should be used if undigested food is thought to be the cause. An enema of warm soapsuds will relieve the lower bowel. A little calomel should also be given. Two grains of chloral hydrate with five grains of sodium bromide may be given to a child of one year with good result.

**Retrodislocation of the Uterus.**—After mentioning some anatomic facts relative to the position of the uterus, R. S. Hill (*Am. Jour. Obstet.*, August, 1900) states that in his opinion the attachment of the bladder to the pelvic wall assists indirectly in sustaining the uterus, and that the character of its tissue has a tendency to prohibit an increase of its normal anteфлекed position. When all the parts are normal, Nature's provisions are sufficient to prevent uterine dislocation.

The departures from normal which permit pathologic retrodeviation are: (1) Lengthening and loss of tone of the ligaments, and (2) change in the structure of the organ at or near the level of the isthmus. This change, the writer thinks, is invariably due to the retroflexion and not to lack of development. He gives the causes of retrodislocation as follows: (1) A general weakness, involving the pelvic structures, caused by faulty development or lack of maintenance of the physical forces. (2) Sudden tensions on the ligaments, as caused by jolts and jars. (3) Corsets or other constrictions around the abdomen, especially before development is complete. (4) Neoplasms of uterus or other pelvic tissues. (5) Subinvolution. (6) Endometritis and metritis, by increasing the weight of the uterus and impairing the tone of its tissue. (7) Peritonitis, by forming adhesions which draw and bind the uterus in the hollow of the sacrum. (8) Inflamed appendages falling in the posterior cul-de-sac and dragging on the uterus. (9) Destruction of the tone of the posterior vaginal wall, resulting in the formation of rectocele, which drags upon the uterus. (10) Inflammation of the cellular tissue and abnormal distention of the rectum and bladder. In the treatment of retrodislocation an attempt should first be made to remove the etiologic factors. The writer believes that adhesions should be destroyed, not stretched, and that the abdominal is preferable to the vaginal route. When the displacement is due to inflammation of the cellular tissue between the uterus and bladder, this condition should be overcome by repeatedly and forcibly carrying the cervix backward. For maintaining the uterus in its normal position the pessary is useful, but Hill does not think it is indicated in retroflexion. Of the methods for shortening the round ligaments he prefers Alexander's operation, which he considers an ideal operation for retroflexions, but for retroversions he believes it should be assisted by some measure which will shorten the uterosacral ligaments and thus restore their function. The writer condemns vaginal fixation of the uterine body, although acknowledging that it must be used sometimes for want of some better procedure.

**Transient Spastic Convergent Strabismus.**—Spastic convergent strabismus, or strabismus from tonic spasm of the internal recti muscles, is a condition to be sharply differentiated from ordinary concomitant convergent squint and from squint due to paralysis of the abducens. It is one of the well-recognized ocular manifestations of hysteria, but, apart from this, Samuel Theobald (*Bull. Johns Hopkins Hosp.*, July-August, 1900) thinks it should be regarded as a rare anomaly to which the text-books pay scant attention. He cites a number of writers on the subject and reports a case of his own. The patient was a little girl, seven years of age, who was convalescing from an attack of influenza, one of the chief symptoms of which had been per-

sistent and severe headache. She had also had a right otitis media and some diplopia which was followed the next day by a squint. The writer saw the patient on the second or third day after the squint manifested itself. At this time there was in both near and distant visions a very decided convergent squint of the left eye. There were no signs of paresis of either rectus externus. There was a hypermetropia of rather more than 2 D. Four days later, although the mother reported that the patient's eyes had been straight at times during this interval, the writer found the squint unchanged except that perhaps there was a greater tendency to alternate. To suppress the accommodation a two-grain solution of atropine was dropped into the eyes twice a day. Two days later, the eyes being thoroughly under the influence of the atropine, the squint seemed less marked. The child was meanwhile taking iron and quinine and her physical condition was improving daily. Five days later no trace of the squint remained. There was no disposition to recur and an esophoria for distance of only four degrees was shown by the Maddox rod. After another four days, the eyes having remained quite straight, the atropine was discontinued. At the end of a week she had recovered her power of accommodation without any recurrence of the squint. Tests showed a practically normal muscle balance. Theobald concludes that the squint was purely a spastic one, due, doubtless, to an irritation (of influenzal origin) of the innervation center which controls the associated action of the internal recti muscles.

**Technic of Herniotomy.**—F. D. Bird (*Lancet*, August 4, 1900) believes the Bassini operation for hernia to be the greatest step toward radical cure. He emphasizes the importance of the following points: The skin incision should be short and should not extend down over the external ring into the pubic fat, for here several large vessels are found; it should be made well above Poupart's ligament and may be carried above the internal ring if necessary; to get at the external ring one may pull down skin, subcutaneous tissues, and vessels at the lower end of the wound. The aponeurosis should be split along the line of its fibers and the external ring should never be incised if it can be avoided. The left finger is pushed under the cord at the internal ring, the sac located and gently dissected by forceps from the cord. By beginning thus above, the sac is more easily stripped out and less injury is done to the vessels, nerves and cremaster muscle of the cord, and even large scrotal hernia can be manipulated in this way. The sac is tied and cut as usual. When the internal oblique makes a satisfactory muscular curtain, deep Bassini sutures are not only unnecessary but harmful, throwing the muscle-action out of gear and preventing it from forming an evenly resisting barrier to internal pressure, besides placing foreign bodies in the depth of the wound. In this operation there is very little bleeding.



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SATURDAY, SEPTEMBER 1, 1900.

## THE LATEST PHASES OF APPENDICITIS.

DESPITE all the attention that has been given to this extremely interesting subject during the past ten years seldom does a medical meeting fail to bring out, either in the papers read or the discussions they call forth, some features of the affection that have at least an air of novelty. The last meeting of the American Medical Association was no exception in this respect. Some very suggestive contributions to our knowledge of the affection were made. More practically helpful than the formal ideas of papers and discussion was the trend of thought with regard to certain features and phases of appendicitis, as it could be noted in the course of conversations between those whose clinical experience with the affection amply justify their holding and heralding opinions of their own. It seems well worth while to give a permanent record and a wider audience to some of these suggestive thoughts, and therefore certain of them are collected here.

It seems clear that trauma plays a much greater rôle in the etiology of the disease than has been suspected. This accounts to a great degree for the fact that vigorous young men are often the favorite victims of the affection. The position of the psoas muscle with relation to the cecum and appendix is of importance in this matter because the normal function of the muscle

may cause disturbances of anatomical relations and consequent interference with blood supply. Direct trauma from blows in the iliac region is frequently noted in the history of these cases. It is probable that the more infrequent occurrence of appendicitis among women is due rather to their comparative freedom from traumatic disturbances than to the supposed additional artery to the appendix in the sex, the claimed anastomotic branch from the ovarian artery. As a matter of fact the statistics of the comparative occurrence of appendicitis in the two sexes are presenting every year a less favorable showing for the female. More successful differential diagnosis between ovarian and appendicular affections are making operations for appendicitis in women much more common than formerly.

Another very interesting feature of appendicitis that is attracting no little attention is the occurrence of the affection among young children. Autopsies in cases of death among children from obscure abdominal conditions have shown in a number of reported cases appendicitis as the primary cause. The number of patients under 5 years of age who have been operated upon for the affection within this last year is quite large. The number of patients even under one year of age in whom appendicitis has been successfully diagnosed and as successfully relieved by surgical interference is already remarkable. It is undoubtedly true that many of the cases of supposed intussusception or even volvulus in the very young are really atypical appendicitis. This fact only emphasizes the doctrine that operation for serious abdominal conditions should be undertaken early and the significant symptoms should not be masked by the giving of large doses of opium early in the attack.

Finally, confidence in making the diagnosis of appendicitis even when the symptoms are not typical is gradually being developed even in conservative minds. The most perplexing confusion of symptoms results when the appendix lies upward along the ascending colon and the pain is referred to the liver region. Suspicion of the presence of a gall-stone is almost sure to assert itself as an alternative diagnosis. At the present time, however, recurrent pain from a gall-stone is an indication for operation. When there is a suspicion that cannot be lulled that appendicitis may be present and not a gall-stone, the necessity for an exploratory operation at least is greatly emphasized.

## EVOLUTION AND ALCOHOL.

THERE has been a very prevalent idea among moralists and reformers that to catch the devil's tail and give it a tweak is a signal triumph of progress. Alcoholism, or the "Vice of Intemperance" as the temperance reformers call it, has called forth more of such heroic feats than any of the allied excesses of the sexual or criminal instincts; partly because it is even more widespread, and partly because it is more openly seen and discussed.

But the general opinion of the public and even of many medical men concerning the possibility of eradicating the evils of alcoholism is based upon a false theory as to the physiological cause of the condition. Most of the religious temperance reformers refer the intoxication impulse back to the sinful nature of man, or to an inherited taste or "craving," from which relief can be found in a higher power. These hypotheses are so unmerited and indefinite as to be unworthy of consideration.

From the medical profession come varying hope-denying and hope-giving theories of cause, such as a diseased appetite, the effect of an alcoholized protoplasm, a pathological perversion of physiological cell-action in the cerebral cortex, a specific pathological craving which can be cured by a specific remedy. All these but tread on the tail of the adversary. They do not explain, nor do they help the situation.

The truth lies not in any one cause upheld by Christianity, pessimism, or quackery, but in many, from which it is difficult to detect the true from the false.

One of the best discussions of the subject that has recently appeared is by George E. Partridge in *The American Journal of Psychology* for May, 1900, entitled "Studies in the Psychology of Alcohol." He has gathered facts about the intoxication impulse as it is felt and as it expresses itself in the form of motor activity. Avoiding abnormalities, he has examined the forms of intoxication, its periodicity, and its physiological effects in primitive peoples, in civilized races, and in animals, with the result that he finds no evidence that animals appreciate the state of intoxication or acquire a craving for alcohol, while among primitive peoples the use of intoxicants is very general, although primitive man is not a steady nor an habitual drinker. His intoxication is likely to be periodic and is generally connected with religious or social occasions, and is apt to

be characterized by great excess and uncontrollable excitement. The conclusions reached by all observers are that the higher the degree of civilization, the greater the abundance and variety of stimulants used. It is the low classes of civilized society that drink to excess, because they have less control, and it is the men that drink more than the women because the latter have less desire for the effects of stimulation.

The writer has made a study of sixty-five cases of inebriety, most of whom were men confined in criminal institutions or were voluntary patients in inebriate asylums, for the purpose of determining the nature of the craving for intoxicants as felt by the inebriate. The results of testimony show that the craving for alcohol is a rather unimportant part of the intoxication impulse. Nearly all said that after a few days, generally about ten days, there was no longer any craving for alcohol, especially when it was impossible to obtain it. In short, the popular idea of the "craving," under psychologic analysis, resolves itself into a nervous, restless sensation which any strong excitement would satisfy, and is seen chiefly in neurotic cases. The evidence from these cases indicates that the craving for drink is not a craving from childhood, nor is it hereditary, although popular belief in that fact and in the organic nature of the alcohol habit makes the drunkard lose hope and often takes away the possibility of cure. The craving in fact is not a craving for alcohol but a craving for the mental state it produces; and the desire for it, as literature and observation show, is caused by a desire for pleasure and abandon and a desire to escape from physical or mental pain. All description of intoxication in the literature of the ages, from that of Greece to the modern French novel, resolves itself into one of these two primary motives. In either case there is a strong impulse to escape the bondage of ennui, poverty, monotonous occupation, or mental, moral or physical pain, and find relief in an intense and primitive state of consciousness. This may be obtained in several ways, but evolutionary selection has given alcohol the evident preference.

Dr. Partridge sums up this evolutionary theory in the words, "The intoxication impulse is not a physical craving nor a specific impulse, but it is one form of expression of a general instinctive tendency which has developed in the race as an aid to mental growth. It is an instinctive expression of surplus energy."

The author, basing the causes of intoxication



upon psychic rather than physical phenomena, suggests that the cure of intoxication lies along the same line. The change of environment that suggests the desire for abandon, the easing of conditions of pain and worry, and, above all, the will that decides to control the impulse, are the largest factors concerned in cure.

## ECHOES AND NEWS.

### NEW YORK.

**Death from Sulphonal.**—A dose of 400 grains is said to have resulted fatally.

**Dr. Herold Sues.**—Dr. Justin Herold has brought suit for \$100,000 damages against the Metropolitan Street Railway Company for injuries received through the colliding of a Second Avenue electric car with a horse-car of the Eighty-sixth Street crosstown line, upon which he was a passenger, on May 31st. Dr. Herold's leg was crushed in the collision.

**Death from Tetanus.**—Charles Borrmann, eight years old, died in the Seney Hospital, Brooklyn, August 28th, of lockjaw. Two weeks ago while playing in a vacant lot near his home a sliver entered his right foot. It was pulled out, but four days afterward, as the wound seemed about to heal, the first symptoms of the disease developed.

**State Medical Association's Directory.**—The New York State Medical Association has issued its annual directory for New York, New Jersey and Connecticut. The directory contains the official list of the pharmacists registered in the city of New York, an alphabetical index of all the physicians in the three States, and a fund of information about hospitals, medical societies and benevolent institutions.

**Obituary.**—The Rev. Dr. John S. Breckinridge, the superintendent of the Methodist Episcopal (Seney) Hospital in Brooklyn, died August 28, 1900, at Churchill Hall, Stamford, Conn., where he had been for about a month. He was born in Pennsylvania sixty-three years ago, and entered the New York East Conference in 1861, after graduating from Wesleyan University, Middletown, Conn., in the class of that year. He served as pastor of several Methodist churches in Brooklyn, and was at Simpson Church, Brooklyn, when appointed as superintendent of Seney Hospital, a Methodist institution. He continued to fill the position successfully until his death. It has been through his unceasing efforts that the Hospital has had such a successful career. He leaves a widow, son and daughter.

**Dr. Frank Stephen Milbury,** a specialist in diseases of the eye, ear, nose, and throat, died August 29th at his home in Brooklyn. Dr. Milbury was born nearly forty-four years ago in the Province of New Brunswick. After taking the com-

mon school course he first studied dentistry. He practised for some years in Nova Scotia and in the City of Mexico, after which he studied and graduated in general medicine and surgery. He then went to Vienna and studied the special branches to which he devoted the last ten years of his life. While studying abroad Dr. Milbury traveled extensively in the Orient. After leaving Vienna he studied in the clinics of Stuttgart, Edinburgh, London, Paris, and in Berlin under Prof. Koch. Dr. Milbury married Miss Anna Schoeps of Breslau, Germany, who is now in Europe. He left no children.

**A City for Sick Animals.**—Dr. H. H. Kane of 138 W. 34th Street, New York City, member of Society for the Prevention of Cruelty to Animals, is seeking to arouse public sentiment to the point of securing by purchase an old farm, with plenty of pasture, where worn-out horses and other animals may be taken care of and may spend the last days of their lives. For this purpose he has just issued a small pamphlet entitled "Jack," containing notes of the proposed plan with descriptions of the dog cemeteries of Paris and of London. Lovers of pet animals and of the horse are asked to subscribe to the "Little City of the Dead and the Horse Haven," by which title he proposes to dedicate the farm.

**Christian Science and Insanity.**—Miss Myra Andrews, thirty-two years old, a dressmaker, was removed to Bellevue Hospital, August 27th, violently insane. It required the combined efforts of Drs. Stewart and Sheldon, of Flower Hospital, two policemen and the ambulance driver to get the woman into the ambulance. Miss Andrews became ill a week ago. She had some time before that taken up the study of Christian Science and had practically accepted it as her faith. When her illness came she resolutely declined to call a physician or take medicine.

**To Isolate Consumptives at Bellevue.**—The completion of the new insane ward at Bellevue Hospital, this summer, has relieved the somewhat crowded condition of that institution during the construction of the new building, and given Commissioner Keller an opportunity further to carry out his plans for the isolation of all phthisis cases brought into the hospital. When Commissioner Keller began to build the new insane ward, about eighteen months ago, it was found necessary to use the alcoholic ward for the temporary confinement of the insane patients, as that ward was the only other building at all adapted for such purposes. The patients in the alcoholic ward were then transferred to the building known as the phthisis ward, and the consumptive patients, here, had to be shifted as best they might to temporary wards in the main building. Under these conditions the staff and nurses of the hospital were compelled to labor for over a year, but now the insane patients are in their new ward, the alcoholic patients back in their old quarters, and the phthisis ward is being

scrubbed and cleaned preparatory to its occupancy again by the consumptives. Next February the hospital on Blackwell's Island will be relieved of its insane patients, who will be apportioned among the different State hospitals near the city. Then Commissioner Keller intends to make this into a general isolation hospital for cases of consumption under the care of the Department of Charities. In so doing he will also further relieve Bellevue by placing the present phthisis ward at its disposal for other work.

#### PHILADELPHIA.

**Dr. Elwood B. Kirby.**—The Mayor has appointed Dr. Kirby a member of the Department of Charities and Correction.

**Philadelphia Hospital.**—Dr. H. W. Cattell, Pathologist, and Dr. J. C. Seltzer, Laryngologist, have recently resigned.

**A Midwife's Record.**—Mrs. Mary James of Edwardsville celebrated her fiftieth anniversary as a midwife August 22d. During that time she has assisted at the birth of 4700 children. She is the mother of fifteen children.

**Health Report.**—Deaths in the city for the week ending August 25th were 372, a decrease of 128 from those of the previous week and of 34 from the corresponding week of last year. There were 26 deaths from cholera infantum and 7 from sunstroke. Contagious diseases: Diphtheria, 37 cases, 9 deaths; scarlet fever, 18 cases, 3 deaths; typhoid fever, 61 cases, 9 deaths.

#### CHICAGO.

**Banquet to Dr. Fenger.**—November 3d a banquet will be tendered to Dr. Christian Fenger on his birthday. It will be national in character, and as a token of respect to Dr. Fenger it will show that his services are highly appreciated by his colleagues, as a surgeon, rendered to his profession and to humanity. The committee having charge of the affair are Drs. William A. Evans, W. L. Baum, and J. B. Murphy.

**Professor of Physiology in Chicago.**—Dr. George P. Dreyer, Ph.D., Associate Professor of Physiology in the Johns Hopkins Medical School, has just been elected full professor in charge of the physiological department of the College of Physicians and Surgeons, the medical department of the University of Illinois, Chicago. This college was recently established, and Dr. Dreyer has spent the summer purchasing an outfit of apparatus and supplies for the physiological laboratory. He will assume the duties of his new position on October 1st. Dr. Dreyer has been connected with Johns Hopkins for the last ten years. He received his A.B. in 1887, and was fellow in biology in 1889 to 1890.

**Grand Army of the Republic.**—The medical arrangements for the Thirty-fourth National Encampment of the G. A. R. are under the direction of Dr. T. J. Robeson, late Major-Surgeon, First

Illinois Cavalry, U. S. V.; Dr. Arthur R. Reynolds, City Health Commissioner, and J. F. Hultgen. These gentlemen will be assisted by 150 physicians, who will be assigned to meet all trains containing soldiers. They will visit quarters free morning and evening. A temporary hospital has been arranged for in the Keith Building, which is the medical department headquarters. Field hospitals provided with ambulances will also be stationed at various points along the line of march to care for cases of emergency.

**Modern Medical Healers.**—John Alexander Dowie's exclusion from the United States under the immigration laws, on the allegation that he was once convicted of crime in a foreign country, New South Wales, is being sought by a Chicago attorney, and others who were formerly identified with the "Zion" movement. Mr. Stevens has begun the circulation of a petition directed to Terence V. Powderly, Commissioner of Immigration, seeking the permanent separation of Dowie from his flock. The General Overseer of the Christian Catholic Church is at present in England, where he is inspecting lace manufactories in preparation for installing a similar plant at his proposed city of Zion near Waukegan. Thence he is to go to Palestine. The precedent suggested for Dowie's exclusion is found in the recent refusal on the part of Commissioner Powderly to allow Fitzharris and Mullet, convicted of the Phoenix Park murders, to land at New York. Dowie is not a naturalized citizen of this country, although he has lived here ten years.

#### GENERAL.

**Professor Virchow's Golden Wedding.**—Professor Rudolph Virchow quietly celebrated his golden wedding, receiving numerous congratulations on August 24th. He announces his intention to attend the German military maneuvers next month.

**Cases of Plague at Glasgow.**—Three persons (father, mother and child) who are suffering from bubonic plague have been placed under the care of the medical authorities August 27th. On August 28th, it is reported that the outbreak of bubonic plague in Glasgow is more serious than was thought at first. Another death has occurred and ten families have been removed to the reception house for observation.

**Havana's Yellow Fever.**—The Surgeon-General of the Marine Hospital Service reports that from August 1st to August 26th there have been 204 cases of yellow fever reported at Havana and 34 deaths. Many of the cases were very mild. There were eleven new cases on August 27th. On account of the mildness of the cases and their short duration the Surgeon-General has wired to all the quarantine stations on the Atlantic and Gulf coasts advising special care in inspection to detect mild cases.



**Cholera in India.**—The present epidemic of cholera is reported to be one of the worst outbreaks on record. The bubonic plague is child's play compared with it. The natives are said to be dying like flies, at the rate of three thousand a week. The epidemic is undoubtedly due to the pollution of the scanty water supply during the famine.

**Mrs. Dr. Wright Dead.**—Mrs. Dr. Wright, a midwife, had a hospital at Gilman, Ill., in which a young girl died. Dr. Wright was accused of being responsible for her death, and a warrant was issued for her arrest. The woman, however, defied the authorities and opened fire from her windows on the policemen sent to apprehend her. In the fighting that followed and in which a large mob took part, one of the defenders of the house was killed and Dr. Wright, herself, shot.

**The London Underground Electric.**—London's "Two-Penny Tube" has been recently dubbed "The Refrigerator" by reason of its coolness, and London medical men are interesting themselves as to the effects of the sudden cooling of the body which the lowered temperature brings about. Fortunately the surface temperatures in London are not as excessive as they are in New York or the variation in temperature would produce more serious results.

**Sickness of American Horses.**—Dr. I. P. O'Connor, veterinarian to the British Army in South Africa, will leave New Orleans in a short time to continue his studies of the peculiar disease that has broken out among American horses in Africa and that is causing such heavy losses. It attacks the horses from this country and does not seem to trouble the native stock. The belief is that the disease is a kind of malarial fever. It is slow and debilitating and soon pulls the victim down to skin and bones. It is the newest thing in veterinarian circles. Dr. O'Connor believes that the disease is similar to pink eye or acclimated fever. The British War Department has sent some of the ablest veterinarians, Americans as well as British, to South Africa in the hope of solving the problem and finding a cure for a malady which is causing it a loss of \$1,000,000 a month for horses.

**Obituary.**—Dr. Ferdinand E. Chatard, a prominent physician and surgeon of Baltimore, died at Atlantic City on Monday evening. Dr. Chatard belonged to a distinguished French family. His grandfather, Dr. Pierre Chatard, and also his father, were eminent surgeons. Dr. Ferdinand Chatard was educated at Mount St. Mary's College, Emmitsburg, and was graduated in 1861 from the Maryland University of Medicine. He also studied several years in the universities of Europe. Upon his return to Baltimore he became associated with his father in practice, and made considerable reputation in obstetrics. He was a leading member of the Maryland Medical and Chirurgical Faculty and the Academy of Sciences. Much of his time was devoted to

charitable work, he being President of several institutions. His brother is the Right Rev. Francis Silas Chatard, Bishop of Vincennes, Ind., and his sister, Juliana Chatard, of the order of Sisters of Charity, at Troy, N. Y. Another brother is Dr. Thomas M. Chatard of Washington. Dr. Chatard leaves a widow, two sons, and one daughter.

Prof. Henry Sidgwick, professor of moral philosophy at Cambridge University since 1883, died August 29th. He was born in 1838.

Prof. F. W. Nietzsche died August 26th at Weimar of apoplexy. For the past ten or fifteen years he has been insane.

**Smallpox in United States.**—The spread of smallpox continues throughout most of the States. Up to the present time there have been reported 3346 cases of this disease as compared with 805 cases reported during the same period of time in 1899. The increase is particularly notable in Alaska, Colorado, Indiana, Louisiana, Minnesota, Texas, North Carolina and Ohio. These last two States show a marked increase. In North Carolina, from May 1st to June 30th, 440 cases were reported, as contrasted with 68 during the same period of 1899, while during the first six months of 1900 Ohio has reported 1353 cases, contrasted with a total of 20 cases for 1899 during the corresponding months.

**The Mosquito.**—The Department of Agriculture is about to issue a bulletin prepared by Dr. L. O. Howard, United States entomologist, on the mosquito of the United States. It discusses their structure and biology and indicates the difference in all stages of existence between the kinds of mosquitoes which transmit malaria, and those which do not, and also discusses the subject of remedies. About 250 species of mosquitoes are known, of which only about thirty have been found in the United States. The bulletin says that since the recent opening of the gold fields in Alaska, and the great influx of miners and traders a knowledge of the abundance and ferocity of the Alaskan mosquitoes has become widespread, the Government surveying parties in starting for Alaska for their summer's work are in the habit of consulting the Department for mosquito-bite remedies. Mentioning the reputation of New Jersey in connection with mosquitoes, the bulletin says there is a constant carriage inland from the marshy coast of very many mosquitoes, the railway trains seeming to be the most important mode of conveyance. Many of the cars contain mosquitoes by the hundreds. In this way even mountain resorts will get their supply of lowland mosquitoes, and with the improvement of railway service, and the increase in the number of through cars, the danger is constantly increasing. The source of supply to distant points where mosquitoes are ordinarily rare is thus kept up. The report also says that of the remedies in use in houses, the burning of pyrethrum powder and the catching of mosquitoes on the walls

in kerosene cups are probably the best, next to a thorough screening and mosquito bars about the bed. The remedies for bites mentioned are glycerine and household ammonia.

**Red Cross Aid for India.**—The first work taken up by the American National Red Cross under the powers conferred upon it by the last Congress will be for the relief of the famine sufferers in India. To avoid delays and to prevent complications with the reorganization, which will now be carried on at National headquarters in Washington, Miss Barton has placed the India famine work in the hands of a committee, with headquarters in New York City. This committee is now ready for active operations. It has selected for its headquarters Rooms 903 and 904 in the Presbyterian Building, 156 Fifth Avenue. At 9 o'clock in the morning these rooms will be opened for work—the first relief work of the new Red Cross. The committee has selected as its depository of funds the North American Trust Company of 135 Broadway, to which all contributions should be sent direct. Checks should be drawn to the order of the North American Trust Company, and marked "for the Red Cross India Famine Fund." In its new form the Red Cross will establish permanent auxiliaries in all parts of the United States, with branches in Cuba, Porto Rico, and the Philippines. It will be ready at a moment's notice to send trained and experienced relief agents to any part of the world where the relief of suffering may be needed. It will be ready, also, to receive and forward money and supplies in cases where trustworthy agents, such as missionaries and consuls, are on the ground in sufficient force to undertake relief administration.

**Preventive Inoculation for the Plague.**—Dr. A. Calmette, director of the Pasteur Institute, of Lille, in a paper read at the International Congress of Hygiene and Demography, 1900, says: Since the work of Roux, Yersin, Calmette, Borrel, Salimbeni, and Haffkine the efficacy of the preventive inoculations, whether by antipest serum or by cultures of the bacillus pestis killed by exposure to 70° C. for one hour, can no longer be doubted.

We know that the serum confers an immunity, certain and effective, almost immediately after the injection. This immunity is, however, unfortunately of very short duration; it rarely exceeds twelve to fourteen days. It is therefore necessary, in using the antipest serum as a preventive, to inoculate 10 cc. of the serum every two weeks in order to insure protection. This method has both its advantages and its disadvantages.

The advantages are: (1) It confers an immunity almost absolute and immediate. (2) The injection of the serum is not painful, and is therefore readily accepted, even by children. (3) It is never harmful. (4) The serum, when it is prepared antiseptically, is a product whose activity remains intact a very long time, almost in-

definitely. The disadvantages are: (1) The very short duration of the immunity. (2) The cost of producing the serum and the difficulty of obtaining it in sufficient quantity in order to vaccinate the population of an entire city every fourteen days. (3) The difficulty of making obligatory or even of inducing a majority of the population to accept a vaccination which must be repeated so frequently. These disadvantages are of such a nature as to limit, to a great extent, the employment of the serum as a prophylactic. Its use is, however, indicated under the following circumstances: (a) On board of infected vessels during the voyage to prevent the disease spreading among the passengers or crew. (b) In order to immunize the personnel in the lazaretto as well as those concerned with the unloading or disinfection of merchandise brought by suspected vessels or vessels having had cases of plague on board. (c) In the docks, warehouses, and stores where suspected merchandise is sometimes handled. (d) In times of epidemic, for the immediate protection of persons found in contact with the sick and who may be already infected. The method of vaccination by cultures of the bacillus pestis killed by heat at 70° C., applied on a very large scale by M. Haffkine for the past three years in India, possesses the undoubted advantage of conferring a much longer immunity than that produced by the antipest serum.

**The Plague.**—The *Englishman* of Calcutta, as reported by the *British Medical Journal*, gives a summary of a resolution, extending over some 25 pages, which has been published in the Home Department on the chapters of the India Plague Commission dealing with the measures for the suppression of plague. Every aspect of the question is fully dealt with, and the main conclusions appear to be as follows: The Government of India thinks the obligation of private persons and medical practitioners to report cases of sickness can be relied on only in very exceptional circumstances, and that house-to-house visitations are justifiable only when plague exists in small well-defined areas. The Government agrees with a surveillance over persons arriving from infected areas, and believes this means has been freely resorted to in rural areas, but does not favor the system of rewarding informers of plague cases. It publicly thanks the many volunteers who devoted themselves to the work of fighting the plague, and thinks the expense of special reporting agencies are fully compensated for by their success. Much attention is devoted to the question of corpse inspection, but on a review of the whole case the Government considers the compulsory examination of bodies a very unpopular measure and its object as likely to be defeated. With regard to the compulsory removal to hospitals the Governor-General accepts the conclusions of the Commission, but desires that the removal should be compulsory only in places and under circumstances when it can



be an effectual precaution. The removal of moribund patients is prohibited. Government agrees that the segregation of contacts should be abandoned as ineffective and harassing, except where special conditions are stated by the Commission to enable it to be carried out. The complete evacuation of villages and small towns when attacked is believed to be the most effective safeguard against the spread of the disease yet discovered. The question of disinfection is dealt with at length, and Government considers the Commission's advice generally excellent. Government and the Commission are in accord with the precautions taken regarding the annual pilgrimage to the Hedjaz, but the examination of the passengers from one infected port to another is now ordered to cease. With regard to the examination of railway passengers, all local governments are desired to report on the question of reducing the inspection stations, as from an economical point of view it is highly desirable now to maintain only those which are absolutely necessary; and, acting on the advice of the Commission, all disinfection stations maintained on the railways are ordered to be closed. The detention of ordinary passengers because they come from infected areas is also prohibited. The stoppage of booking passengers is regarded as a wise precaution and will continue. The shutting up of people in infected houses and prevention of their movement from an infected area by means of a cordon or other means is condemned. Finally, Government expresses its recognition of the careful and sympathetic manner in which the Commission has examined the difficult problems, acknowledges its valuable advice, and feels confident that the local governments will be able to benefit therefrom.

**India.**—The returns for the week ending July 21st show for all India only 198 deaths from plague. Of these, 84 occurred in Calcutta, 70 in Bombay city, 10 in the Bombay Presidency exclusive of the city, 20 in the Mysore Province, and 12 in Bengal, exclusive of the metropolis. Ahmedabad and Karachi have been declared free of plague. The fall in the death-rate from plague is, however, annulled by the great increase in mortality in Bombay from cholera.

**Hong Kong.**—During the week ending August 11th 29 cases of plague occurred in Hong Kong and 28 deaths from the disease. It is fortunate that plague is unknown in the neighborhood of Peking and at Shanghai, where the allied troops are concentrating. Newchwang, a Manchurian town, said to be held at present by the Russians, is the only place where plague has been reported from in all the wide district of China north of Foochow in which the troops are operating.

**Mauritius.**—For the week ending August 9th, 6 fresh cases of plague are reported in Mauritius, and 3 deaths from the disease. It would appear that a recrudescence of plague has begun in Mauritius, for it is only a few weeks ago that we were able to report that there were no cases of plague in the island.

**Constantinople.**—The ten days' quarantine imposed upon all arrivals from Smyrna has been reduced to forty-eight hours.

**Hamburg.**—The steward of the British steamer Rosario, who was suffering from plague, died August 10th. At first it was thought this man was suffering from typhus fever, but subsequent bacteriological investigation proved the disease to be plague. No other person has been attacked by the disease, and it is hoped that in consequence of the strict precautionary measures which have been taken in Hamburg further spread of the disease will be prevented.

## CORRESPONDENCE.

### OUR LONDON LETTER.

[From Our Special Correspondent.]

LONDON, August 18, 1900.

ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION—THE ADDRESSES—INFLUENZA AND THE NERVOUS SYSTEM—SUBDIAPHRAGMATIC ABSCESS—NOTIFICATION OF PUERPERAL FEVER.

THE sixty-eighth annual meeting of the British Medical Association was held in the historic East Anglian town of Ipswich, famous as the birthplace of Cardinal Wolsey. The meeting was better attended than the last one, held at Plymouth, but the number of members present—about 600—was not as large as might have been expected. The excursions, receptions, entertainments, and other social functions were as usual well carried out. The scientific proceedings, while not without interest and value, cannot be said to include any very remarkable contributions to science or orations which were great literary efforts. As most of these have appeared in the MEDICAL NEWS further comment upon them is unnecessary.

Dr. Judson S. Bury (Manchester) opened a discussion on "Influenza as It Affects the Nervous System." He referred to the diversity of the symptoms of influenza in different epidemics and in different persons which made the constructions of a scheme of the symptoms very difficult. Four types could be recognized according to the organ chiefly affected, *vis.*, (1) the mucous membrane; (2) the gastrointestinal tract; (3) the heart; (4) the nervous system exclusively. In all forms the nervous system was profoundly affected, as evidenced by pain in the head and back, which was seldom absent, hyperesthesia, delirium, and depression. When ordinary nervous symptoms were absent others could be found, such as undue dyspnea in pneumonic cases, tachycardia and bradycardia (which were essentially nervous) in cardiac cases. He recognized two chief groups of nervous affections following the disease—those of the febrile stage, such as meningitis and encephalitis, and those arising later, probably due to a less virulent toxin, and in which visible degeneration of nervous matter might be discovered, yet in many cases was not

found. In the first group he distinguished a comatose and a delirious type. The former was very serious and often ended fatally. He quoted two cases. Post-mortem meningo-encephalitis was found with endarteritis of the vessels of the pia mater. Other results of influenza were cerebral embolism, thrombosis, and abscess. The delirious form was common in children. The cord might be attacked with the brain or independently. Generally it was affected after the initial attack, but sometimes during it. Every known form of nervous disease of brain, cord, or nerve, had been reported as the result of influenza. The peculiarity of the influenza toxin as distinguished from the diphtheria toxin was that it affected nervous tissue haphazard and not in groups.

Mr. Rickman J. Godlee (London) read an important paper on "Subdiaphragmatic Abscess," which he said is not a disease but a by-product of some other disease. None of the symptoms is pathognomonic. In the early stages there might be hicough, a stitch in the side, and friction. Much benefit in diagnosis may be derived from the careful use of the stethoscope. The doses might give rise to dullness in the lower chest and be accompanied by cardiac displacement. It may be diagnosed from pleurisy by the fact that the chest movements are not impaired; that the upper limit of dullness is not well defined, and that respiration may be heard below this limit. In emaciated persons the lower border of the right lung can frequently be seen ascending and descending, which is quite against the presence of pleurisy. If gas is present (subdiaphragmatic pneumothorax) the bell-sound may be obtained. The tympanitic note may reach as high as the second rib, yet thoracic respiration may not be interfered with. The causes are (1) gastric, rupture of an ulcer with localized suppuration; (2) intestinal, rupture of duodenal or colonic ulcer; (3) appendicitis; (4) suppuration of hydatids of liver or spleen; (5) hepatic abscess; (6) peripheral abscess; (7) subcutaneous injury (rupture of a preexisting ulcer was produced); (8) wounds; (9) metastases; (10) caries of the ribs; (11) thoracic suppuration spreading downward, (12) various causes, actinomycosis, tuberculosis, peritonitis, and disease of the pancreas.

Dr. Berry Hart (Edinburgh) read a paper on "Puerperal Fever in Relation to Notification." Referring to the difficulty of definition of puerperal fever, which was put forward as an objection to notification, he said that cases should be notified when the clinical features of general or threatened pyemia are present; sapremic conditions and localized septic pelvic conditions need not be notified. The advantages of notification are that it would show the frequency of the condition and that it helped in prevention by putting the medical officers on the track of careless midwives or nurses. Notification, however, is of little value unless accompanied by provision of hospital accommodation and isolation in bad cases. The speaker does not believe in the origin of

puerperal fever from "drain-poison," so ably advocated by Dr. Playfair.

#### THE ETIOLOGY OF TEXAS FEVER DISCOVERED BY AMERICANS.

To the Editor of the MEDICAL NEWS:

DEAR SIR: There appeared in the MEDICAL NEWS of July 28th a short paragraph in the "London Letter" referring to Dr. L. W. Sambon's contribution to the *Journal of Tropical Medicine*. The part that has prompted me to write to you is the sentence referring to Drs. Smith and Kilborne. It says: "Smith and Kilborne have proved by experiment that the common cattle-tick is the agent whereby the red-water or Texas fever is transmitted to cattle." This statement, appearing as it does in your "London Letter" and in connection with the work of a European, will naturally give the impression to those not acquainted with the work of these men that they are also Europeans, and that the credit for this work belongs across the water, while the facts in the case show this to be one of the most important discoveries made by the United States Bureau of Animal Industry.

Under the direction of Dr. D. E. Salmon, Chief of the United States Bureau of Animal Industry, Dr. Theobald Smith and Dr. F. L. Kilborne, both connected with this Bureau, began in 1888 to investigate the cause of Texas fever in cattle and carried it on more or less continuously until 1891, when it was definitely proven that the Texas cattle-tick, *Boophilus bovis*, carried within its body a protozoal micro-organism, called the *Pyrosoma bigeminum*, which is introduced into the blood of cattle when the tick attaches itself to the animal, thus producing the disease known as Texas fever, Southern cattle fever, splenic fever, or red-water fever of cattle. This is the only way in which this disease is transmitted. Remove the ticks and you remove the source of infection from any diseased animal. As a result of the discoveries of these men, the Secretary of Agriculture of the United States issued an order February 26, 1892, creating a line across the United States from the Atlantic to the Pacific, known as the quarantine line, and all cattle bearing the *Boophilus bovis*, or Texas tick, are prohibited from coming north of this line, except during the months of November and December for immediate slaughter, and then only under quarantine supervision until killed. This is to protect Northern cattle from this disease, and, to show that it is effective, Texas fever is now not known North of the quarantine line. There is now a serum or antitoxin which promises to prove successful by inoculation against this disease. I write this explanation so that the statement quoted above may be more clear and the credit for this great work fall where it justly belongs, i.e., to the United States and not to Europe.

SAMUEL G. HENDREN, V.M.D.,  
U. S. Inspector, Bureau of Animal Industry.

Indianapolis, Ind., August 15, 1900.



## TRANSACTIONS OF FOREIGN SOCIETIES.

*French.*

SYPHILITIC DIARRHEA—SYPHILITIC BONE LESIONS—INTESTINAL INVAGINATION—ORTHOSTATIC ALBUMINURIA—TYPHOID FEVER AND OYSTERS—PANCREAS IN DIPHTHERIA—NEW CULTURE FOR GONOCOCCI—GELATIN INJECTIONS IN ANEURISM—COCAINE AND MIDWIFERY—TUMOR OF THE FLOOR OF THE FOURTH VENTRICLE—DIONINE AS A LOCAL ANESTHETIC—PRIMARY HYDATID UTERINE CYST—CYSTIC MASTITIS—OPERATIVE ASEPSIS AND ANTISEPSIS—NEW OPERATION FOR PILES—METHYLENE BLUE AND THE PLEURAE—ADENITIS IN CHRONIC PLUMBISM—GONORRHEAL OSTEOPERIOSTITIS, APPENDICITIS AND THE BACILLUS PYOCYANEUS.

At the Académie de Médecine on July 3, 1900, LEREBoullet mentioned a case of obstinate emaciating diarrhea, persistent for eighteen months and resistant to all the ordinary medical means. The patient was thirty-eight years old, had contracted syphilis eight years previously and suffered from general diffuse adenitis. He was put upon rapidly increasing antisyphilitic measures, with the result that the glands diminished and the diarrhea soon ceased. Although gastroenteric troubles are rare in tertiary syphilis, the rapid favorable reaction to the antispecific treatment leaves little doubt as to the cause in this case.

FOURNIER said that although gastroenteric symptoms in syphilis are very rare, they make up a distinct class of case and are indisputably important. He had himself seen a few dozen instances. Not only has this condition been established from a clinical standpoint with definiteness, but also from the anatomopathological, because patients known to have been the victims of syphilis at autopsy show miliary gummata, plague-like infiltrations, ulcers and scars of ulcers. After ruling out tuberculosis, specific lesions alone remain. The diagnosis can be established on the following basis: A history of syphilitic infection, the absence of the ordinary other causes of chronic diarrhea, the presence of physical evidences of syphilis; the therapeutic results of antisyphilitic treatment. The mixed treatment is the better, but often iodide of potassium is enough. One fact must be borne in mind, namely, that this manifestation of the disease may be very late in its appearance.

ZAMBACO (Constantinople) exhibited a large number of photographs of skulls and bones collected in Egypt showing various osseous changes. These he endeavored to show indicated the existence of syphilis and tuberculosis twenty-five centuries ago.

FOURNIER said that this conclusion was fallacious, because so many simple causes may set up chronic periosteal-osseous lesions closely like syphilis, for example trauma may cause exostosis, while varicose ulcer may set up periosteal and then bony thickening.

LANCEREAUX, July 10, 1900, gave the details of a case of aneurism cured by subcutaneous injections of gelatin, which was the first of his series to come to autopsy and the first to undergo the injection treatment. In November, 1898, the patient entered the hospital with a mild attack of the grip from which he recovered completely and was about to leave the hospital when he was found dead in bed one morning. Death had apparently come through heart-failure such as one expects in aneurismal and aortic disease. Since the gelatin treatment is addressed solely to the aneurismal pouch, one cannot expect the arterial disease to be reached by it. No injection had been practised on this man later than two months previous to his disease. The report of the post-mortem examination contains the following facts: Normal thoracic and abdominal viscera; no general arterio-sclerosis; aortic sclerosis of advanced degree with plaques, confined to the thoracic portion; normal abdominal aorta; an aneurism, the size of a child's head, situated 3 cm. beyond the valves connected with the vessel-channel by an opening 3.50 cm. in diameter, extending forward, having eroded the sternum and ribs and thinning the skin, beneath which pulsation had been very marked, so that it consisted of a subcutaneous and an intrathoracic chamber each packed with old blood-clots in such a way as to be impermeable to the blood-current. Previous to the gelatin injections this patient had been subjected to diet treatment, prolonged rest in bed, ascending doses of iodide of potash and repeated bleedings. Nevertheless, the aneurism continued to enlarge and its symptoms increase, threatening to break through the skin at almost any time. Then the injections were begun, and almost the next day after the first the size decreased, the pulsations lost their emphasis, and the pains ameliorated. Repeated injections cured these symptoms altogether. For a year he did his work to fatigue and remained well. A few relapses occurred which were cured in the same way. The lesion was apparent in two auxiliary pockets filled with more recent clot. The conclusions of this case are (1) that no case of aortic aneurism can be cured by rest in bed, notwithstanding the support of this method so fervently and recently given by Litten (Berlin); and (2) that subcutaneous injections of gelatin repeated, according to the case 25 to 30 times, are needed to promote thorough clotting in the sac and cure.

BARRETTE communicated a case of hydatid cyst of the uterus treated by incision, evacuation and drainage. A young woman of twenty-one years, after a fall and blow upon the abdomen, noticed sudden steadily progressive enlargement of the abdomen. These features determined an operation. The tumor was regularly ovoid, smooth, elastic and situated below the umbilicus. At the operation through a median incision a smooth uterine tumor presented in the wound. The organ was brought up into the field and opened over the prominence of the swelling. Thick yellowish fluid was

evacuated and a mass of ovoids, flabby, and looking like half grape-seeds. About three and one-half quarts were voided. Dissection of the walls was not possible because the cyst-membrane was so intimately blended with the uterine muscle. Therefore the cavity was thoroughly curetted, cleansed and sterilized, and the margins of the uterine and abdominal wounds were united and four drains carried into the depths of the wound. Recovery was uneventful. The cyst receded. The drains were removed on the eighteenth day. The histological examination showed many withered daughter-cysts and hooklets, showing a hydatid cyst of the uterus.

DOLERIS, at the session of July 17th, rehearsed observations by Malurtic and himself on the effects of cocaine during parturition. Five cases were concerned in his report. In all injections of one or two centigrams of cocaine into the arachnoid cavity produced total anesthesia of the lower segment of the body after a delay of five to ten minutes and for a period of one and one-half to two hours. The uterine contractions were more frequent, efficient and prolonged; in the intervals a semi-contracted state of the organ persisted (which constitutes a contraindication of the use of the drug for versions and similar procedures); the uterine contractions were absolutely painless; hemorrhage after delivery seemed no greater; and the effect of the drug upon the child appeared to be *nil*.

FRANCOIS-FRANCK read in behalf of Marinesco (Bucharest) a note on a case of gliosarcoma of the floor of the fourth ventricle. At first the mass involved the urinary center, set up a marked diabetes insipidus, and later, extending and effecting the glycosuric center, produced a diabetes mellitus. The lesson the pathological condition teaches is that the bulbar respiratory center is not at the point of the calamus scriptorius, as enunciated by Flourens, but more deeply situated in the bulb.

DARIER narrated a case of iritis with violent crises of pain which were controlled quickly and thoroughly by one to two drops of a five-per-cent. solution of dionine. His conclusions are that the local effects of this drug are such as to make it a good substitute for morphine in cases of deep and acute ocular pain, as occurs in iritis, iridochoroiditis, glaucoma, etc.

MICHAUX, at the Société de Chirurgie, June 27th, reported for Auvray a case of intestinal invagination in a male, twenty-nine years old, believed to have appendicitis. The intussusception occurred in the ileocecal region and was easily reduced. Prompt complete recovery followed. He then continued by noting three cases of his own in adults, as follows: The first was in a case diagnosed ulcer of the stomach with perforation. The intussusception was in the upper jejunum into itself, caused by a polypus and necessitating resection of the invaginated bowel. The union was imperfect, a breach in the intestine occurred and death followed. The second case

simulated appendicitis. A resection here in the ileocecal region was followed by complete recovery. This patient was a female, twenty-eight years old. The last case was in a woman fifty-six years old, caused by a lipoma. A resection and union by a button did not seem to promise well. An artificial anus was made, but death followed. Here the lesion was in the sigmoid.

RECLUS reported a case in the service of Faure which had been caused by a polypus. The intussusception was reduced and the polyp ablated, but recurrence of the former occurred four years later, the bowel became gangrenous, eighty centimeters were resected, but death supervened in ten days.

RECLUS at the meeting of July 4th stated that his position as to cystic disease of the breast is always highly conservative, especially if there were any question as to the diagnosis. If, however, there seemed likelihood of there being a neoplasm he always performs early and wide excision.

DELBET added that, since cystic mastitis is very likely inflammatory in its origin, surgical interference should be avoided, except in cases where the development is very rapid and the deformity positively considerable.

TUFFIER said that the tendency which this disease has to cancerous degeneration is worthy of note and should affect the treatment.

WALTHER was of the opinion that on principle a cystic breast should be left alone, but on the other hand pain might make interference a necessity.

NELATON said that many cystic breasts in his own practice had not been operated on at the outset but that he had found it necessary later. Nevertheless he would hesitate to pronounce this disease benign.

SECOND contributed a case operated on for indisputable cancer after fifteen years' treatment for cystic breast and a second case in which an early operation for cysts of the breast had been followed by a recurrence with small multiple cysts. These were punctured. For five years there had been no recurrence.

LEJARS claimed, in discussing operative asepsis, that it is possible to do abdominal surgery although caring for septic cases. Still he considered gloves an essential in septic cases, although they may be dispensed with in clean cases. For two years he had followed this plan and is convinced that it offers the best results. By extraordinary care in cleansing the hands it is possible to go without them, but in the long run probably their use is advisable.

RECLUS remarked that in the recent report on this subject by Bazy and Delbet no minute had been made of how long the hands had been exposed to the infection and how soon after it the sterilization had been done. This last point appeared to him very important because the sooner the disinfection the better the chance of good results.



GUINARD held fast to the principle that for septic operations gloves must be worn. Certain cases, however, require a very delicate touch and in these repeated washing of the hands seemed indicated and sufficient. To have a double set of assistants, one for clean and the second for pus cases, seemed a good plan but is almost unnecessary and often impossible.

POIRIER, in preference to any other, uses much soap as a protective in rectal, vaginal, buccal and other septic examination procedures.

POTHERAT described a new method of operating for piles, devised by Dupraz (Geneva). After freeing the musosa as in the method of Whitehead, it is secured to the skin by four sutures, opposite each other in pairs. Flaps are then made centered on the sutures and in order to secure perfect coaptation tubes of Girard (Berne) are used. The other steps of the operation are the same as Whitehead's.

DELBET, resuming the subject of operative sepsis, at the meeting of July 11th, said that in four instances he had taken cultures from the skin of the patient just before beginning to operate. In three no growths were found. In the other cultures were obtained, but this case he had not himself scrubbed. Again, he wrapped his arms in thick sterile bandages to provoke the greatest possible sweating for five minutes. Then cultures were taken by scraping the skin. Thus far all his tubes had remained sterile. So far as he had gone he held the opinion that the field and the hands of the operator may be fully sterilized even after contamination. It seemed, therefore, likely to him that the dust of the air is often the source of infection.

LUCAS-CHAMPIONNIERE said he is convinced that it is very difficult but not impossible to sterilize the skin. His method is good penetration of the soap and an efficient antiseptic solution. Bichloride of mercury he considers less penetrating than a five-per-cent. solution of phenol. To the latter he pins his surgical faith and can acknowledge only one calamity. Two days after attending a case of puerperal tetanus he inoculated a patient with tetanus during a laparotomy. Antiseptic procedure, he claims, is much better than aseptic and thinks his position is borne out by the records of his services.

PIERRE-UEKLEN, at the Société des Hopitaux, June 29th, said, in a discussion of Archard's paper on orthostatic albuminuria read at the previous session, that the condition cannot always be ascribed to the persistence of slight infectious nephritis, although Archard had given this hypothesis such cordial support. Not every deficiency of kidney function or variation in the permeability of the organ must depend upon organic lesion. In the same manner not every functional derangement of the heart, stomach, liver, etc., rests on essential pathological changes, but on accidental, often non-assignable troubles. During twenty years of careful observation of this condition, no autopsy had ever set down a

cause. Like its course, its source is little understood. As a rule under proper hygiene, healthful diet and living and advancing age, the albuminuria tends to subside and then leaves the patient absolutely normal. Occasionally, in conjunction with a true infectious nephritis, the disease may continue, but it is the infectious factor which determines this.

ARCHARD said he could not imagine an albuminuria without some degree of lesion. True functional derangement of the kidney seems improbable.

MILLARD then reported an instance of a perfectly sound child, never having had severe sickness, yet suddenly overtaken by albuminuria, slight at night, distinct by day. The case appears as a typical orthostatic albuminuria.

RENON reported the results of studies by Latron and himself on the permeability of the diseased pleura for methylene blue. After having become satisfied with the health of the kidneys, the coloring matter was injected into the pleural cavities of two patients having pleurisy, sero-fibrinous with effusion. The blue appeared very promptly in the urine, showing that the pleura, although inflamed and producing an exudate, was still an absorbing surface. The peculiarity is that in one case the excretion lasted nine and in the other three days and seemed to depend somewhat upon the relation between the resorption of the effusion too. It was previously established that neither case was tuberculous.

RENDU said that the condition of the lungs determines the rate at which absorption and resorption by the pleura occur. If the lungs are inflamed or congested these functions are in abeyance or checked; if normal then they proceed promptly.

CHANTEMESSE stated that he had two cases of enteric fever in patients who did not use boiled water, but who traced their infection supposedly to oysters. One had eaten them eight, the other seventeen days before the invasion. Although this source could not be definitely established, the speaker considered these cases to indicate danger in certain oyster-beds.

RENON made remarks on a case of chronic plumbism with the feature of localized inflammation of the submaxillary salivary glands. Often enough one finds a plumbic parotiditis with conjoint infection of all the other salivary glands or localized in itself. Here, however, he had to deal with inflammatory involvement of the submaxillary itself. The symptom came on in the midst of other chronic symptoms, colic, catarrh, and paralyses, and, in fact, was an accompaniment of an attack of colic. Under suitable treatment the enlargement disappeared in twenty days. Its character was a hard, slightly lobulated, painless, not tender, movable tumor. In the absence of inflammation of the mouth-flow and of the duct orifices the source of disease seemed to be systemic.

HIRTZ, at the sitting of July 13th, presented a

young woman, who after an attack of gonorrhea set up a specific arthritis of the right knee. Examination showed later, after the subsidence of the acute process, great thickening of the lower end of the femur and head of the tibia. The radioscope showed the site of the disease to be chiefly periosteal and its extension to be the inner aspect of the extremities of both bones.

GIRARD and GILLAIN, at the Société de Biologie, June 30th, stated that in twenty-nine autopsies on children dead of diphtheria examinations for pancreatic lesions were made and the following results obtained: There was no hemorrhagic pancreatitis; but frequently congestion, arterial and capillary, endo- and periarteritis and endophlebitis, all usually about the acini; generally no lesions of the connective tissue stroma or of the bodies of Langerhans. In this way the pancreas appears to escape the damage so frequently marked in the liver, kidneys and suprarenal bodies, and the explanation seems evident of the fact that in diphtheria symptoms of pancreatic insufficiency are absent, namely, glycosuria, lipuria, and fatty stools, as the chief signs.

F. BEZANCON and GRIFFON have been carrying on experiments with the gonococcus in blood and gelose as a culture medium. They find that blood combined with gelose makes a most excellent soil for these cocci, giving at the end of twenty-four hours round, flat, transparent colonies, of dimensions varying with their number, at a temperature of 37° C. From these colonies the cocci can be recovered at the end of twenty-four hours in their typical morphological characters and not apparently broken up into grains, as so often occurs if other media are employed. The longevity of the germ in it is also great. Six months was the longest life of it during their observations. All these facts make this a very fine culture medium.

COYNE and HOBBS, at the July 7th meeting, reported a case of appendicitis in which the infection was mixed bacillus coli communis and bacillus pyocyaneus. The latter were highly virulent after injections in rabbits; the former not at all.

## SOCIETY PROCEEDINGS.

### THIRTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

*Held at Paris, August 2-9, 1900.*

(Continued from page 315.)

#### SECTION ON INTERNAL MEDICINE.

##### FIFTH DAY—AUGUST 7TH.

**Tobacco and Valvular Heart Lesions.**—Dr. Eid of Constantinople reported a series of cases in which valvular heart lesions developed in persons who used tobacco to excess. No other cause could be found. In one of the cases the patient scarcely ever had the mouthpiece of his Turkish

pipe out of his mouth. In another the patient lighted the next cigarette always with the butt of the one he had been smoking. All of the patients were confirmed inhalers. Where valvular lesions have not been demonstrable in certain patients, marked irregularity of the heart's action and some impurity of the sounds of the heart have been noticed. Tobacco heart lesions, in Dr. Eid's experience, always occur at the aortic orifice and seem to be the result of a degenerative process beginning in the arterial system. Drs. Rendu of Paris and Brochard of Marseilles reported similar cases.

**Heart Lesions in Arrhythmia.**—Prof. Huchard of Paris said that there is an irregularity and palpitation of the heart which is not due to any cardiac lesion. It may last for years without the occurrence of a single other symptom and without any fear of an untoward event. This is usually either a reflex gastrointestinal episode due to the fact that the vagus is distributed to the stomach and intestines as well as the heart, and as a result irritation of one branch may be reflected to the terminal filaments of another branch; or it may be due to mechanical interference with the heart's action by a distended stomach. When the cardiac arrhythmia comes on suddenly without warning and then grows progressively worse, it is due to cardiac sclerosis. This is usually the result of systemic arteriosclerosis invading also the coronary arteries and affecting the heart muscle itself. This is especially the palpitation of the elderly. It may become painful, give rise to angina pectoris and end fatally.

**Cardiac Palpitation and Sclerosis of Auricles.**—Dr. Merklen of Paris said that in a number of reported cases in medical literature, where palpitation of the heart had been complained of in life, at the autopsy sclerosis of the auricles, especially of the left, was found. It was the existence of this lesion that made the use of digitalis dangerous in palpitations of the heart. The drug should not be used to steady a cardiac palpitation unless the physician is reasonably certain that this lesion does not exist. In palpitation from stomach dilatation digitalis scarcely has a place.

**Danger of Digitalis.**—Dr. Huchard said in the discussion that digitalis is usually contraindicated in palpitation. If the irregularity is functional and due to the gastrointestinal tract, treatment should be directed to that. If the cardiac arrhythmia is due to cardio-sclerosis digitalis is positively dangerous. In Dr. Huchard's experience sclerosis of the auricle has had no special connection with arrhythmia of the heart. In some of the cases after death auricular sclerosis was noted; in others it was not.

Dr. Hewitt of London said that not only lesions of the heart itself but also of the pericardium may give rise to palpitation of the heart. The adhesion of the pericardium to the heart causes an irritability of that organ which easily leads to irregularity of action. This is especially



the case if an overdistended stomach should further interfere with the heart's action.

**Serum Diagnosis of Tuberculosis.**—Dr. Arloing of Lyons said that in over 50 cases of incipient tuberculosis he has been able to recognize the presence of a tubercular lesion by serum diagnosis after Widal's method before it could be recognized by physical signs, or at a time when all other means of diagnosis left one in doubt.

Dr. Blumenthal of Berlin, Prof. Leyden's clinical assistant, said that the method of serum diagnosis of tuberculosis had been tried in Prof. Leyden's clinic at the Charité, Berlin, and that the results obtained confirmed those of Dr. Arloing.

**Serum Diagnosis in Animals.**—Dr. Arloing said that the early diagnosis of tuberculosis is most important, because the eventual cure of the disease depends on the treatment being begun as early in the case as possible. The use of tuberculin is considered by many to bring with it a certain amount of risk. Hence the desirability of some other method. In order to substantiate the claims made for the serum diagnosis method it was tried also on animals. In over 70 cases it proved to be correct except in a single case. It is a question whether this case may not have been one of those cases of pseudotuberculosis in which all tests fail and in which even the tuberculin test fails, though this is accepted as practically infallible now by veterinarians all over the world.

**Tuberculin for Early Diagnosis.**—Dr. Bernheim of Paris said that tuberculin had now been used by so many physicians in so many different countries that there could no longer remain any reasonable doubt of its inoffensiveness. For very early diagnosis of incipient tuberculosis no method equals the injection of tuberculin for ease and accuracy. The tuberculin method would be much more used than it is only for the haunting fear that lurks in many minds as to its dangers. If employed in incipient cases this danger does not exist. If a patient is having night-sweats and rapid pulse with some rise of temperature in the afternoons, even though the physical signs in the lungs are as yet dubious, it is evident that there is no need of applying the tuberculin test.

**Differentiation of Pleurisy.**—Prof. Widal of Paris read a paper in which he pointed out a method of differentiating the various forms of pleurisy by a microscopic examination of the pleuritic effusion. He called attention to the importance of this subject because so frequently what seems to be a simple pleurisy is really of infectious origin. His method he calls that of cytodiagnosis, *i. e.*, cell diagnosis, and he uses it also for the differentiation of exudates in joints and other serous cavities in the body. A few cubic centimeters of the pleuritic exudate are defibrinated and centrifugated. The cellular sediment is stained with thionin, with eosin, and with Ehrlich's triacid stain. The pleuritic exudate from

what is called idiopathic pleurisy or pleurisy from cold is characterized by the almost exclusive presence of small lymphocytes that tend to run together and a few red blood-cells. It will be remembered that Prof. Landouzy has shown that this form of pleurisy is nearly always tuberculous. In old tuberculous cases the effusion is different from that just described. It contains only a few cells, old and degenerated polynuclear leucocytes mainly, sometimes traces of the detritus of broken-up red blood-cells. In the exudate of a serofibrinous pleurisy due to the streptococcus there are only some polynuclear neutrophils to be found. Pleurisy due to the pneumococcus gives a profound impression of a struggle between the invading microorganisms and the pleura cells. Its effusion is characterized by the presence of a few red blood-cells and scattered lymphocytes. Many polynuclear cells occur. A characteristic cell that is seen in less numbers than the polynuclear cells is a large mononuclear lymphocyte of endothelial origin which contains not only microbes but polynuclear cells within its substance. Mechanical pleurisies which come on during heart disease, or in the course of Bright's disease, or cancer, or from pressure, or local irritation, are characterized by the presence only of large endothelial cells which have fallen from the surface of the pleura. These occur singly or in pairs, at times in groups of three or four and these groups make it easy to recognize this form of pleurisy. Of course this is the case only when the pleural cavity remains perfectly aseptic. In rheumatism the joint-fluid during an acute attack contains many polynuclear neutrophils, which shows that rheumatism is surely infectious, though cultures made on all ordinary media remain in cases of uncomplicated rheumatism constantly sterile.

**Creosote Treatment.**—Dr. Savoie of Paris said that the treatment of tuberculosis by large doses of creosote is the most effective treatment. It should be given in doses as large as the patient will bear. The toxicity of the sputum soon becomes diminished, as has been demonstrated by a series of animal experiments. In animals with experimental tuberculosis the course of the disease is much modified by the use of creosote.

**Spread of Tuberculosis in Stores.**—Dr. Savoie spoke of the special parts of stores which seem to retain the infectious material and from which successive employees are infected.

**Cacodylate of Soda.**—The use of this drug is attracting much attention, and Dr. Savoie has found it useful in conjunction with creosote. It should be given by rectal injection.

**Sanatoria.**—The present duty of the medical profession is to encourage the foundation of sanatoria as much as possible and send patients to them at the earliest possible moment after the diagnosis of tuberculosis is made.

Dr. Herard of Paris said that it must always be borne in mind that it is not the air, rest, and feeding at a sanatorium that alone do good. These

measures will fail unless they are taken under the direction of a physician. It is the following of the proper rules for each case under constant medical control and encouragement that have given the good results so far secured in the sanatorium treatment of consumption. The element of medical superintendence is the essence of the treatment.

**Heredity and the Pretubercular Stage.**—Dr. Papillon of Paris called attention to the fact that the family history can be of assistance in recognizing the preliminary stage of tuberculosis. In families with a neuropathic history the beginning of the tuberculosis is often in the form of a pretubercular neurasthenia. In families where gastric troubles are frequent the preliminary stage of the tuberculosis often consists of a series of dyspeptic symptoms. In the same way in rheumatic families there are often arthritic symptoms. In a word, the toxin of the bacillus of tuberculosis always affects parts having a lowered vitality whether from heredity or acquirement. By remembering this fact a very early diagnosis may often be made.

#### SECTION ON SURGERY.

#### THIRD DAY—AUGUST 5TH.

(Continued from page 318.)

**Vesico-Rectal Anastomosis.**—Dr. Frank of Chicago read a paper with this title and showed post-mortem specimens from a series of experiments on dogs done within this last two years. In his early experiments he implanted one or both ureters in the rectum after a method of his own, but found the kidneys infected every time. Then he tried joining the bladder to the rectum with success, and without subsequent renal infection. He described the operation as done with his own absorbable bone button. He expects this operation to be found useful in certain cases of ectopic vesical and bladder troubles generally.

**Hernia.**—Dr. Phelps of New York said that in 1892 he became thoroughly convinced that the reason why relapses occur in hernia, and why herniæ so frequently follow abdominal operations, is because the scar tissue stretches after the operation. To obviate this he introduces a continued suture of fine silver wire which becomes encysted and remains so during the natural life of the patient. He contends that one of the serious mistakes made by all operators is the ligation of the sac. He claims that frequently after ligation retraction of the peritoneum takes place, leaving a large surface varying from  $\frac{3}{4}$  to 2 inches in diameter, which is not covered by the fibrous tissue intended by Nature as the support of the abdominal walls. He cuts off the sac and finishes the operation as any other abdominal operation, stitching up the peritoneum and transversalis fascia with a continued suture of silver wire. Over the transversalis fascia a mattress of fine silver wire is placed and the deep

layer of muscles stretched over it with a continued suture of silver wire. A small glass drainage-tube is inserted down to the wire mattress for the purpose of drainage. If a large hernial opening is to be closed, and there is very much attenuation of the muscular coats of the abdominal walls, a second mattress of wire is placed between the deep and superficial layers of muscles. The cord is brought out from the inguinal canal external and superior to the internal abdominal ring. A notch in the aponeurosis of the muscles prevents strangulation and the cord lies directly under the skin in its course to the scrotum.

**Inguinal Hernia.**—Dr. Gerard of Berne said when the hernia is small or only medium in size, the majority of the procedures recommended by the different authors will give favorable results. But when the hernia is large and the inguinal canal obliterated it is difficult to make a wall strong enough to resist a relapse. On this account the author has modified the Bassini operation as follows: He opens up the inguinal canal, if it still exists, from the upper part of the external ring. He removes and closes the sac after treating the contents according to indication. He stitches up the internal oblique and the transversalis after the manner of Bassini. He turns in the two edges of the external oblique about 4 cm., superimposes the superior on the inferior or vice versa and stitches them together. He gave statistics of 543 cases treated in this way. In this number he has had but 8 relapses, four of which followed suppurative of the site.

**Phonetic Apparatus After Laryngeal Operation.**—Dr. Gluck of Berlin demonstrated such an apparatus on a patient. It was connected with a silver tube in the trachea by means of a rubber tube, and consisted of a small metal box made like a larynx. When talking the patient held this box before the lips and talked over the top of it. Though by no means perfect, it was interesting to see a process just the reverse to that which we normally practise. We articulate first and form the words afterwards with our lips and tongue. In this case the formation of the words seemed to be primary to the articulation of the sound.

#### FOURTH DAY—AUGUST 6TH.

**Antisepsis versus Asepsis.**—Dr. Bloch discussed more especially the treatment of wounds in general and said that though all surgeons at once fell into the antiseptic treatment of Lister it was only natural that they should look for new antiseptics that would prove better than carbolic acid. It was this search for better methods that brought about the aseptic treatment. Yet the speaker insisted that the results with this method do not recommend it; on the contrary, all the clinical work done since Lister's discovery shows that every wound should be treated as if infected and therefore with antiseptics and drainage. Moreover, he contends that no better antiseptic than carbolic acid has been discovered. Finally, he



expressed great doubt as to the value of serum-therapy, especially that of antistreptococcic serum, and of internal antiseptics in general.

Dr. Lejars of Paris said that this question of the treatment of infected areas was essentially one of practice; that no theoretical doctrine should be at all considered. In recent years the treatment of infected areas has served as a theme for numerous experimental and bacteriological researches. The problem being complex it is necessary to study it from different sides: (1) Recently infected areas where the infection as yet remains local, or better, perhaps, recent wounds supposed to be infected. This presumption ought to be extended to every accidental wound, because as a matter of fact surgical wounds themselves are far from being free from microbes. Moreover, we have no means or recognizing in a recent wound whether the micro-organisms are virulent or not. Therefore every accidental wound at least ought to be treated as an infected one. Now, what shall be the treatment? The primary thing is mechanically to clean the wound as well as possible, but to respect the integrity of living cells that they can aid us by their reaction of defense. To accomplish this cleansing, sterile water with sterile sponges is the best, though it is not always the nature of the liquid employed so much as the manner of its employment that gives the results. Antiseptic solutions sufficiently diluted so as not to injure the cells of the part have no better effect than sterile water. The dressing should be aseptic, absorbent, protective, and should immobilize the part in a manner applicable to different regions, and for a variable time. (2) Infected areas where the infection is evidenced by local or general reactions more or less marked. Here also two possibilities must be borne in mind, recent infection without suppuration and with suppuration well developed. In either case specific serumtherapy is indicated. This is the natural scientific method, and is the principal one of the future. Unfortunately, it has not yet reached anything like perfection. We possess now only the antitetanic and the antistreptococcic sera; the former has furnished results only sufficient to entitle it preventive, the second is limited in its application. In certain cases of putrid suppuration or gangrene, oxygenated water, which seems to have a powerful effect on anaerobic organisms, will be a valuable resource, the efficaciousness of which has been proven. (3) Infected sites accompanied by severe general symptoms, traumatic septicemia. In this again specific serumtherapy should be employed. But local treatment, which should be rational in accordance with the preceding principles, should not be neglected. Moreover, the natural resistance of the body should be enhanced.

**Surgery of the Lung**—Dr. Murphy of Chicago said that the day had passed when the chest was to be treated differently, as to its surgical aspect, from any other cavity in the body. For years it

has been an axiom to open up an abscess wherever it might be, even in the brain; yet the surgeon stopped at the lung and dared not enter. He claimed what all surgeons feared was collapse of the lung when the chest was opened, but from experiments on animals he has proved that this is easily avoided. The principal factor in respiration is the creation of the vacuum by the movement of the diaphragm downward; now when the right chest is opened, this vacuum on the left side instead of causing the left lung to expand, brings about a deflection of the mediastinum toward the left side causing collapse of the left lung. The speaker said if the mediastinum toward the left side causing collapse of the lung, the collapse would not take place, making the operation a perfectly safe one. He advocated therefore that the lung be treated surgically the same as any other organ.

**Ligation of Aorta**.—Dr. W. W. Keen of Philadelphia reported a case in which this operation was performed for an aneurism of the abdominal aorta. The ligation was made just below the diaphragm. The patient made a good recovery from the operative procedure itself, being up and around the ward. The aneurism began again to pulsate, probably from reestablished collateral circulation. Forty-eight days after the operation the patient died. The autopsy showed an ulceration of the aorta, due to the ligature, and secondary hemorrhage. Dr. Keen reviewed the twelve other reported cases. In all death had supervened by reason of secondary hemorrhage or direct operative causes. The tugging at the elastic wall of the aorta probably induces the ulceration. Murray's method of preliminary aortic compression is worthy of consideration.

#### FIFTH DAY—AUGUST 7TH.

**Gastrointestinal Anastomoses**.—This subject was discussed by a large number of surgeons. The first report was made by Prof. Roux of Lausanne. Experimentation on dogs does not give a true idea of the operation on man. As to the operation, lateral anastomosis is the most practical. Intestinal anastomosis is contraindicated when the state of the patient is such as to permit only an enterostomy. It is to be done in the case of numerous adhesions when it offers greater chances. It is the operation of choice in inoperable tumors and in certain cases of inflammation when the inflammatory foci (as actinomycosis) are multiple and inaccessible. Gastrointestinal anastomosis precedes pylorotomy as a preliminary operation if the condition of the patient renders it at all necessary. It replaces pylorotomy if the tumor is inoperable. In order to give the patient the benefit of a radical operation when possible, or a complete palliative one if a relapse of the tumor should occur, the new pylorus should be made as far away as possible from the old one. In non-cancerous affections of the pylorus and the stomach on account of which a new pylorus is desirable, gastroenteros-

tomy is preferable to pylorotomy and pyloroplasty because it is easier and as efficacious. To a good operator suture is preferable to any instrumental contrivance. Still the Murphy button, the best of the automatic couplers, finds a favorable place in these cases, where minutes are to be counted.

Dr. Souligoux of Paris said that intestinal anastomosis constitutes the principal or at least the complementary operation in all cases of cancer or stricture of the intestine. In case of acute intestinal obstruction the intestinal anastomosis ought to be secondary to the preliminary creation of an artificial anus. In a case of an adherent tumor, or one the removal of which would complicate seriously the operation, the only thing to do is intestinal anastomosis. Lateral anastomosis is always more simple, rapid and sure than circular enterorrhaphy. In cicatricial stenosis of the pylorus or of the first part of the duodenum gastroenterostomy is the operation of choice, since it is almost without danger and since by it the patient may return to an excellent state of health. In stenosis of cancerous origin it is also most often employed, though pylorotomy is to be preferred in those cases where the cancer is only beginning, and is not attached to the liver, pancreas, colon, or preaortic ganglia; and even in these cases the gastroentero-anastomosis will be complementary to the pylorotomy. In case of progressive ulcer of the stomach, gastrojejunal anastomosis will be found useful, not to stop the hemorrhages, but to put the organ at rest and allow cicatrization of the lesion.

**Murphy Button.**—Dr. Murphy of Chicago had been announced to speak on ileus, but the complete discussion of intestinal anastomosis led him to give a few facts in relation to the button brought before the public by him eight years ago. He presented to the section a statistical list of 1620 cases in which the button was used. These cases including all kinds, malignant and non-malignant, acute and chronic, gave a mortality of 19.3 per cent.; 166 non-malignant cases showed a mortality of 2 per cent. He claimed that before the days of the button the lowest mortality was 30 to 40 per cent or higher, and that the first great drop in this mortality came with its introduction. He agreed that it was a little injudicious to leave a foreign body in the gastrointestinal tract over which the operator had no control, but he could not believe in absorbable buttons until they could be so managed that they would not be absorbed before Nature was ready to do without them. In some cases there is union at the end of three or four days, in others not for ten days or even longer. He was at present experimenting with a button made of magnesia and tempered with aluminum which he was not yet ready to put on the market. This button is not absorbable by the gastric juice, but may be made to dissolve by means of alkaline waters.

**Forceps for Intestinal Anastomosis.**—Dr. La-

place of Philadelphia demonstrated his forceps for employment in intestinal anastomosis. The method offers the following advantages: (1) Rapidity and accuracy of suturing without leaving any foreign substance within the gut; (2) an absolute control of the field of operation by means of the assistance of the handles of the forceps; (3) the facility with which the forceps are applied, preventing the escape of intestinal contents during the operation.

Dr. Doyen of Paris spoke of different methods of anastomosis and advocated as most scientific the Laplace forceps.

**Isolation of the Appendix.**—Dr. Ochsner of Chicago said that the vermiform appendix is located anatomically in a position in which it is easily isolated from the general peritoneal cavity. When inflamed the omentum at once surrounds the appendix and if left in a condition of rest, the elimination from the general peritoneal cavity is accomplished and the worst possible result is a comparatively harmless circumscribed abscess. The danger of disturbance of this condition comes from the peristaltic motion of the small intestines. This can be eliminated by giving the patient absolutely no food of any character and no cathartics by mouth until all acute symptoms have disappeared for at least four days, by removing whatever contents there may be in the stomach by gastric lavage and by employing exclusive rectal alimentation, making use of some concentrated predigested liquid food. This does not make operative treatment of appendicitis unnecessary but it changes a very unfavorable acute into a very favorable chronic condition. Extensive clinical observations support this form of treatment.

**Transplantation of the Stomach.**—Dr. Ullmann of Vienna detailed a number of cases in which he transplanted the stomach of young pigs into different parts of the intestine. The animals stood the operation well and though he stitched the stomach into the small intestine, the cecum and even the colon, digestion went on without apparent disturbance of function.

**Pyloroplasty.**—Dr. Segale of Genoa advocated in case of stenosis of the pylorus, when it is non-malignant, pyloroplasty by a new method. Instead of resecting the valvular portion of the stomach he makes a curved longitudinal incision from some distance, above the pylorus, through the pylorus and some distance below it. He now slides this incision up on itself and stitches it. This is so accomplished that the pyloric valve takes a spiral turn, so that an opening is left along the spiral.

**Resection of the Rectum.**—Dr. Jonnesco of Bucharest said that he had done resection of the rectum and pelvic colon by the abdominal-perineal method, accompanied by emptying of the pelvis for cancer of the rectum four times resecting 30 to 40 centimeters of the intestine, with two cures and two deaths. One of these died of peritonitis on the fifth day, the other of cardiac



collapse the day of the operation. Moreover, both cases were the extremes of what might be called operable cases, one on account of the great extent of the cancer, the other on account of profound cachexia. This operation is superior to all others because it assumes in operable cases removing as far as possible of the chance of relapse and again it reduces the danger of the operation to a minimum. Admitting that removal wide of the tumor is the only rational radical treatment for cancer, it is necessary to resect the rectum entirely and have recourse to an artificial anus, and of all such it is incontestable that the iliac is the best.

**Epididymo-testicular Tuberculosis.**—Dr. Mauclore of Paris said that since the publication of his first report last April he had done several new operations, and could give now the results of 18 cases. These results can be summed up as good, satisfactory, and bad. Good results, that is, atrophy of the whole infected mass, were obtained in all cases without suppuration or fistula. In the second category are those cases in which atrophy came about slowly; in one of these a fistula developed which was cured after four months. In the third class are those that were already suppurating and continued after the operation to infect the surrounding tissue, making necessary a second interference. From these results he believes the operation ought to take a place among those for epididymo-testicular tuberculosis. The operation is very simple, consisting simply of a double ligature of the cord and section between them.

**Torsion of the Spermathe Cord.**—Dr. Nanu of Bucharest reported one case that came under his notice in which the diagnosis was made certain by castration. Classical works make but little mention of this accident, and for this reason and the difficulty of making a diagnosis persuaded him to report the case. He believes that anatomical defect is necessary in its causation, probably most frequently on arrest in development of the testicle.

**Nephrorraphy**—Dr. Biondi of Sienna after insisting on the difficulties, etc., of other operations detailed his procedure. Having cut down on the kidney he puts it back in place and fixes it there by a pad of gauze placed in front of the organ. He then packs in gauze around the kidney in zigzags and allows it to remain for seven or eight days, when he removes the whole and permits the wound to heal. The cure is complete in about twenty days. He claims to have had 13 cures in 13 cases.

**Tendon Transplantation for Paralysis.**—Dr. Vulpius of Heidelberg drew the most favorable conclusions from 160 operations performed by him. He said that the most vigorous asepsis was to be carried out. He sacrifices no muscles, but places the peripheral end of the cut tendon in connection with the neighboring muscles. In this manner he benefits the paralyzed muscles without causing any loss to the healthy ones.

The indications are: Traumatic loss of muscles, tendons and nerves; spinal paralysis, especially infantile spinal paralysis; and partial paralysis generally. He claims that transplantation shows total paralysis to be more rare than is thought. The most favorable place for the operation is the leg, the thigh coming second. The muscles of the forearm offer more difficulty, nevertheless he has had already very satisfying results even there. Relapses have become more and more rare as the operative technic was perfected, and in case of relapse he found that any mistake could easily be corrected by a second operation.

#### THE NEW YORK ACADEMY OF MEDICINE— SECTION ON SURGERY.

*Stated Meeting, Held April 19, 1900.*

The President, William H. Thomson, M.D.,  
in the Chair.

**Physiology of Internal Secretions.**—Professor William H. Howell, of Johns Hopkins University, Baltimore, Md., said that three years ago he discussed this same subject before a congress of American physicians. Just then the subject of tissue-therapy and of internal secretions was attracting a great deal of attention, but the hopes that were raised by Brown-Séquard's experiments were not destined to be realized. There were insurmountable obstacles in the way of successful tissue-therapy. Some advances have been made in the last few years that seem worthy of notice. Originally, when it was noted that extirpation of the thyroid caused symptoms of myxedema or death, these results were attributed according to the theories of Claude Bernard and Brown-Séquard to the absence of the internal secretion of the gland. This theory seemed to furnish also the explanation for the benefit derived from the administration of thyroid in cases in which the gland was absent or defective. It seems to be definitely settled that there is an internal secretion of the thyroid gland and that its active principle is iodothyron. There are two theories for the method of action of this internal secretion; the first supposes that certain toxins are produced in the course of normal metabolism, which act as poison within the body. These are neutralized by the secretions of the thyroid, which would thus form a kind of antitoxin. This theory involves the awkward assumption of a number of specific toxins and antitoxins for the purpose of carrying on normal metabolism. The other theory is that the thyroid secretion supplies an element which is necessary for healthy nutrition. Tissue-therapy with thyroid substance has been eminently successful.

**Pancreas, Adrenals and Ovary.**—Tissue-therapy with the pancreas and adrenals has been a failure. Curiously enough, however, ovarian extract has been productive of good in the hands of a number of conservative observers. It is well known what an influence the ovaries have

on general metabolism. As the result of oophorectomy women put on fat, the uterus and mammae atrophy and certain nerve-symptoms of a very distinctive character occur. These observations on human beings are supported and confirmed by physiological experiments. It has been found that certain symptoms due to ovarian disease and certain affections due to impaired metabolism can be influenced for good by the administration of ovarian extract. Animals from which the ovaries are removed at first show no change in metabolism. At the end of six or seven weeks, however, there is a distinct decrease in the amount of oxygen used by the animal. On the other hand, when ovarian extract is given the amount of oxygen consumed by animals from whom the ovaries have been removed is increased. The oxygenation process in normal animals is not affected by the administration of ovarian extract. There are some differences of opinion as to these results, but the differences would seem to be due to the length of time that is allowed to elapse before observations were taken. It is only after six or eight weeks that this change in the consumption of oxygen is noticed. These observations with regard to the ovary are all the more interesting because it has been demonstrated that the ovary can be successfully grafted from one animal to another and even from one human being to another. The nature of this substance in the ovary which produces the action upon oxidation is not known. It has been suggested that it is probably of a ferment character and it has been spoken of as an oxydase or oxidizing ferment. Neither is it known from what tissue elements in the ovaries the substance is derived. It has been suggested that it originates in the corpus luteum. This is not improbable seeing the almost glandlike character of this structure.

It is an interesting observation that while castration in the male animal causes the same decrease in the oxidation process as does oophorectomy in the female, the administration of testicular extract to castrated animals does not increase the consumption of oxygen in the male, while the administration of ovarian extract causes the increase in the male as well as in the female.

**Parathyroids.**—Some years ago the question of the removal of the thyroid and its effects seemed simple and settled. Of late years, however, it has come to be recognized that the parathyroids, small glandular bodies lying in the neighborhood of the thyroid, play an important rôle in the effects produced by thyroidectomy. It was formerly thought that these little bodies consisted of embryonic thyroid tissue which occasionally developed into fully-formed thyroid tissue after the removal of the thyroid. This hypothesis was not supported by observations. It is now known that the little bodies have a function of their own and that they are probably more important to the economy than even the thyroid itself. When the parathyroids are removed the mus-

cular trembling, the apathy, the malnutrition and the acute marasmic condition which it was customary to attribute to acute thyroidism develop. Moussu attributes the chronic constitutional weakness which leads to death to removal of the thyroids. Rapid death, however, is due to the parathyroids and each of these sets of glands has a secretion peculiar to itself. The parathyroids contain iodine in notable quantities. This is as much as we know yet of their secretion. Clinically we have not so far been able to employ parathyroids for any purpose.

**Adrenal Therapy.**—That there is an internal secretion from the adrenals there seems to be no doubt. Long ago it was noted that adrenal substance caused a rise of blood-pressure. Then it was noted that there was in the blood of the adrenal veins a substance which caused such a rise of blood-pressure if injected into the same or another animal. The amount of this substance contained in the adrenal veins could be increased by irritation of the splanchnic nerves. In a word, the adrenals act as true glands with the reflex nerve-mechanism possessed by ordinary glands that have a duct. If a cannula be put into the adrenal vein and the blood collected and the peripheral end of the cut splanchnic nerve be stimulated electrically, the blood obtained is not more in quantity in a definite time than before, but it contains more of a substance that causes a rise of blood-pressure; that is, there is not a more rapid flow of blood from the gland, but there is greater secretory activity. Ewald thinks that he has obtained the active principle of the adrenals. It is epinephrin, a rather simple body. It has a curious chromogenic effect which connects it with Addison's disease. The effect of the substance is, however, only passing. Hence it is that the use of adrenal has not been successful in Addison's disease. The constant presence of a certain amount of adrenal substance is required to prevent the symptoms of that disease, and, as it is very easily broken up in the circulation, success would require constant injection. The only way to make up for diseased adrenals is by grafting methods. There is some promise in this form of treatment, but it has not yet been successfully accomplished. The action of adrenal substance is peripheral not central. After the spinal cord has been destroyed adrenal extract still causes constriction of the blood-vessels. In the dog the destruction of the spinal cord may cause a fall of blood-pressure from 150 millimeters to 20 millimeters. Restoration of the blood-pressure will take place almost immediately after the administration of adrenal extract. The effect is, however, only temporary and the remedy would have to be administered almost constantly to be of lasting effect. For this reason adrenal substance is not likely to be of any value in surgical shock.

**Internal Pancreatic Secretion.**—The evidence as to the existence of an internal secretion of the pancreas is practically complete. Extirpation of the pancreas is followed by a glycosuria which



becomes a true diabetes even when starch is not consumed; 8 to 10 per cent. of sugar appears in the urine and the ordinary symptoms of diabetes develop, thirst and hunger and emaciation, while oxybutyric acid appears in the blood. On the other hand, when the duct of the pancreas is closed by an injection of paraffin, while the nutrition of the animal suffers the glycosuria that results is only a passing incident. If only a small amount of pancreatic tissue is left, about one-fifth, true diabetes does not develop. Transplantation of the pancreas suffices to prevent the diabetes. Human and pancreatic diabetes seem to be the same affection. It is true that often in the human being no change has been found in the pancreas, but it must be remembered that our methods for the investigation of such changes are crude. It is very probable that changes in the cells of the pancreas make the difference in function which gives rise to diabetes. It is very interesting to note that, while in true diabetes the power to use dextrose is lost, the power to use levulose often remains. It is probable, therefore, that the internal pancreatic secretion is an enzyme, which somehow brings about the conversion of dextrose into other forms in which it is available for purposes of metabolism. Whatever this enzyme is it must be peculiarly constituted so as to fit into one form, *vis.*, the dextro-rotary of sugar, as a key into a lock, while another corresponding substance fits into the levo-rotary form of sugar. Lepine has found a glycolytic enzyme in the blood which acts upon sugar. He assumes that this is the internal secretion of the pancreas. The blood of the depancreatized animals has much less glycolytic power than that of normal animals. There is more of the glycolytic faculty in blood from the pancreatic vein than from elsewhere in the body. Other observers have denied this glycolytic enzyme to be pancreatic and have said that whatever fermentative action there is occurs only in shed blood and is the result of the disintegration of leucocytes. The use of pancreatic extract has been absolutely unavailing in true diabetes. There is some hope that transplantation of the pancreas may yet accomplish something in the therapeutics of the disease. Pancreatic grafts cure diabetes in animals that has been caused by the removal of the pancreas. The transplantation is difficult to perform, however, and so far has not even been tried on the human being.

**Essential Internal Secretions.**—The internal secretion of at least three and probably four glands is absolutely necessary to life. They are the thyroid, the adrenals, the pancreas and probably the parathyroids. There are others of whose function we are not yet sufficiently assured. Only during this last decade have we come to realize the importance of the pituitary body, for instance, in important nutritional processes. Time was when nutrition seemed simple chemistry between the cell and the food-stuffs presented for its use. Now we know that there is

a complicated system of check and countercheck on all cellular processes. Trophic nerves have their influence on all functions and every tissue of the body must be keyed up to its proper tone by specific secretion. Where simplicity seemed to reign the course of investigation has brought us face to face with greater complexity. Progress, however, is constantly taking place and each new advance is a source of encouragement.

In the discussion Dr. Blake said that the active principle of the suprarenals seems to affect especially the muscular walls of the blood-vessels. From it there results a latent dynamic impulse. This seems the best explanation of its effect. While on the healthy heart adrenal substance has no effect, on diseased hearts it has a very marked action. When absorbed from the stomach its power seems to be neutralized by the digestive ferments. Absorbed from mucous surfaces, however, it acts to prevent cardiac intermittence and in mitral insufficiency it is the best cardiac regulator we have. Mitral murmurs have been known to disappear during its use. On aortic insufficiency it has no effect.

**Importance of Parathyroids.**—Dr. Cunningham said that he has been very much interested in the problem of the significance of the parathyroids. In the dog there are two of these organs on each side, one lying within and the other without the substances of the thyroid gland. The latter is rather easily removed; the other not without great injury to the thyroid. Instead of removing the thyroid Dr. Cunningham has experimented in another way. After loosening all the connections of the thyroid but leaving its blood-vessels intact, he surrounded that structure by a purse of animal membrane and then inserted drainage at the lower end of the wound. All three of the dogs on which he experimented developed mild tetany, restlessness, a state of malnutrition and myxedema. One of them was killed at the end of a month, the other two died at the end of two months from a subacute cachexia. This experiment would seem to prove that there is some substance given off by the thyroid that produces a distinct effect on metabolism and preserves the organism from an autointoxication. In these experiments the parathyroids were not disturbed, so that the question of their significance to the organism seems to be an open one.

**Addison's Disease and Adrenal Therapy.**—Dr. William H. Thomson said that, despite the fact that reports of the use of adrenal substance in Addison's disease had usually been unfavorable, he had two cases to report in which the benefit derived from this method of treatment had been most striking. All the other cases of Addison's disease except these two that have come under his observation have proved fatal in twenty months or less. The first successful case was a farmer who came under treatment four years ago. There was absolutely no doubt of the diagnosis of the disease, yet under the influence of adrenal extracts his symptoms abated and he has

continued to enjoy reasonably good health up to the present time. The second case is that of a theatrical manager who came under observation three years ago. He has been seen by some of the best consultants in the city and all are agreed that he is suffering from Addison's disease. In his case the symptoms have abated; especially the intense tiredness and disinclination to exertion have lessened and he has been able to continue his occupation. He is at present abroad attending to his business.

In closing the discussion Dr. Howells said that the physiologists have no theory as to the action of the adrenals, except that some substances which they secrete have an effect on blood-pressure. In the same way they have an effect on the heart, but this is very passing. As to the difference of their action on normal pathological hearts there are as yet not enough observations recorded to justify the construction of a theory in explanation of the action. Further observations are required in order to make clear just how thyroid acts on the heart in pathological conditions.

The important thing in adrenal ductless-gland therapy, as we see it now, is the possibility of grafting portions of glands in cases where degeneration of the original gland has taken place. Experiments in this line are well worth the trying. It is an extremely difficult procedure, but improvements in technic will undoubtedly make it possible and open up a very glorious prospect for tissue-therapy.

As to the parathyroids, it is to be remembered that their importance has been claimed as the result of the experiments of Professor Gley, who is one of the best-known physiological experimenters in the world. His observations have been confirmed by other conservative physiologists and in general considerable weight is placed on the conclusions which he announced.

## REVIEWS.

*The Soul of Man.* An Investigation of the Facts of Physiological and Experimental Psychology. By Dr. PAUL CARUS. The Open Court Publishing Co., Chicago.

THERE are certain features in this production that approach the unique. In the prefatory chapter man's soul is stated to be something mysterious, wonderful and marvelous, and it is certain that the author has in its exposition made it fully up to contract. We do not know where we have ever found such a disjointed exposition of the subject, but perhaps it is a cavil to imagine that the soul of man is aught but a "thing of shreds and tatters."

The work consists of a series of short essays on various interesting topics, interspersed with badly-reproduced pictures of the nervous system

of different animals. The essays rarely rise above the level of mediocrity and as for the relationship of the several parts it is almost impossible to comprehend their coherence. The facts in the main were true for the time when they were written, mostly twenty years ago. Some of the deductions, however, are worthy of serious consideration both for their muddy logic and inaccuracy. We commend one of these to the pregnant woman. "Child-bearing in itself, the growth of a new being, is neither pleasurable nor painful. It often becomes painful by the many disturbances which it is but too liable to cause." We can hardly realize that Dr. Carus has had much personal experience in the matter. The work is amusing, however, and for those but partly trained in physiology or psychology will prove of interest and, if further supplemented by later classics, will be profitable.

## BOOKS RECEIVED.

TEXT-BOOK OF PRACTICAL MEDICINE. By William Gilman Thompson, M.D. Illustrated by 79 Engravings. Lea Brothers & Co., Philadelphia and New York.

DICTIONARY OF MEDICINE. By Alexander Duane, M.D. Third Edition, Enlarged and Thoroughly Revised. With 8 full-page Colored Plates. Lea Brothers & Co., Philadelphia and New York.

MANUAL OF SURGICAL TREATMENT. By W. Watson Cheyne, M.B., F.C.S., F.R.S., and F. F. Burghard, M.D. and M.S. (Lond.), F.R.C.S. In Seven Volumes. Vol. III. Surgical Affections of the Bones and Amputations. Lea Brothers & Co., Philadelphia and New York.

TRANSACTIONS OF THE AMERICAN MICROSCOPICAL SOCIETY. Twenty-Second Annual Meeting, 1899. Vol. XXI. Edited by the Secretary.

MANUAL OF PERSONAL HYGIENE. Edited by Walter L. Pyle, A.M., M.D. Illustrated. W. B. Saunders & Company, Philadelphia. \$1.50.

ATLAS AND EPITOME OF DISEASES CAUSED BY ACCIDENTS. By Dr. Ed. Golebiewski of Berlin. Translated by Pearce Bailey, M.D. Illustrated. W. B. Saunders & Company, Philadelphia. \$4.00.

ATLAS AND EPITOME OF GYNECOLOGY. By Dr. Oskar Schaeffer. Edited by Richard C. Norris, A.M., M.D. Illustrated. W. B. Saunders & Company, Philadelphia.

CLINICAL EXAMINATION OF THE URINE AND URINARY DIAGNOSIS. By J. Bergen Ogden, M.D. Illustrated. W. B. Saunders & Company, Philadelphia. \$3.00.

RETROSPECT OF MEDICINE. Edited by James Braithwaite, M.D., Lond., and E. F. Trevelyan, M.D., Lond., B.Sc., M.R.C.P. Vol. 121. January-June, 1900. Simpkin, Marshall, Hamilton, Kent & Co., Limited, London.

THE LAW IN ITS RELATIONS TO PHYSICIANS. By Arthur N. Taylor, LL.B. D. Appleton & Company, New York.

INTERNATIONAL CLINICS. Edited by Henry W. Cattell, A.M., M.D. Vol. II. Tenth Series. J. B. Lippincott Company, Philadelphia.

A HAND BOOK FOR NURSES. By Dr. J. K. Watson. American Edition under Supervision of Dr. A. A. Stevens. Demi 8vo., 413 pages. Illustrated. W. B. Saunders, Philadelphia.